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Annual report 2018-19, Alberta Gambling Research Institute

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For additional information on research grants and other Institute initiatives, visit

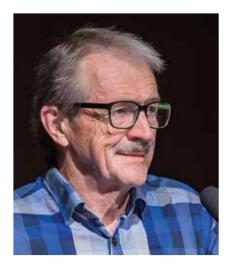
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The Alberta Gambling Research Institute provides grant funding to support peer-endorsed academic investigations into many aspects of gambling research. The contents, recommendations, and findings of the associated research reports represent the views of the researcher(s).

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MESSAGE FROM THE BOARD CHAIR



On behalf of the Board of Directors, I am pleased to present the 19th Annual Report of the Alberta Gambling Research Institute (AGRI) covering the period ending March 31, 2019.

Over the last few years, with the strong support of the Board, AGRI researchers have developed and implemented a very ambitious plan to conduct an extensive study of gambling prevalence in Canada, one of the biggest studies anywhere. Two central datagathering components involve a statistically representative study of prevalence, by province, performed by Statistics Canada; and a very large online survey of a population over-sampled with people who gamble. Together they provide exceptionally detailed survey data, and the Board has arranged for these to be

available to all public-interest researchers through the online portal of Gambling Research Exchange Ontario. The survey methods are supported by extensive background information on the history and current status of gambling in each province, as well as a number of targeted studies using complementary methodologies to provide greater insight into the findings. This is the first synoptic study of gambling in Canada in almost two decades and the most comprehensive study of gambling ever conducted in Canada. The results of the first analyses are being prepared for immediate publication, and other, more detailed studies will follow in the next few years.

The broad purpose of the project, besides giving a detailed picture of the rapidly evolving state of gambling in Canada at a point in time, is to gain insight, e.g. by interprovincial comparisons, into the effectiveness of various measures undertaken to lessen the risk of adverse effects of gambling on Canadians and others. This meets a key objective in AGRI's mandate. The data also provide support for the development of "lower risk gambling guidelines for Canada," analogous to the guidelines on alcohol consumption, the first of their kind in the world. The national project has been supported by the Canadian Council on Gambling Research and the guideline project has also received support the Canadian Centre for Substance Abuse and Mise Sur Tois.

Dr. Garry Smith, a true pioneer in gambling research in Alberta and elsewhere and a pivotal figure in the formation and growth of AGRI, has retired from his position at the University of Alberta. AGRI is working with the University to find an outstanding candidate to do groundbreaking research in the emerging fields related to electronic and mobile gambling.

I would like to thank my colleagues on the AGRI Board for their generous contributions of time and effort. I would especially like to thank Dr. Constance Smith, who retired from the Board during the year.

Sincerely,

Dr. Seamus O'Shea

MESSAGE FROM THE EXECUTIVE DIRECTOR

'Making an Impact' is a particularly appropriate theme for the Institute's 2018-19 Annual Report as it fulfills the Institute's mandate of supporting and promoting gambling research in Alberta. Activities making an impact this year included funding several peer-endorsed high-quality research proposals, supporting graduate student scholarships, and the initiation of the Institute's multi-year national research project entitled "Gambling and Problem Gambling in Canada: A National Study."

The project - known as the AGRI National Project (ANP) - is a comprehensive national investigation of gambling in Canada - and is the first of its kind for this country. This three-year project is being led by Dr. Robert Williams and co-investigators Drs. David Hodgins, Fiona Nicoll, Darren Christensen, Dan McGrath, Nady el-Guebaly, Garry Smith, Yale Belanger and Mr. Rhys Stevens. The project's scope includes partnerships and funding contributions forged with several national organizations. I invite you to read the Annual Report's section on Strategic & Collaborative Initiatives for further information on the ANP. As one of the largest and most comprehensive investigations of gambling in Canada, I anticipate that this project will make an impact provincially, nationally and even internationally!

This fiscal year (April 1, 2018 – March 31, 2019) saw the Institute host two research conferences. Institute conferences are always well-attended by local, national and international delegates. Having two in the past year effectively doubled the number of gambling researchers, regulatory and clinical personnel and students who shared their research findings. This impact is especially great for graduate students and early career researchers who are afforded the opportunity to rub elbows with acclaimed gambling research experts.

I would like to thank the Institute Board, the Government of Alberta, Treasury Board and Finance and the Office of the Vice President (Research), University of Calgary for their support, which enables the Institute in making an impact in the gambling research arena. Thanks also to Rhys Stevens, Librarian, and Karen Buttner, Administrative Assistant, for their support and contributions to the Institute's administrative processes and procedures and making an impact in meeting the Institute's clients' needs and requirements.



This year's Annual Report reflects on the activities which have made an impact in Alberta, nationally and internationally. As one of the oldest gambling research organizations in the world, I foresee the Institute continuing to have a positive and lasting impact within the scholarly gambling research landscape.

Regards,

anho.

Glenda Wong

Core Purposes

To maximize the benefits while minimizing the negative impacts of gambling.

Mission

To facilitate evidence-based broad research that informs gambling public policy and educates Albertans and the wider audience about the effects of gambling.

Values

- Independent and excellent multi-disciplinary research
- · Scientific knowledge and information
- Collaboration
- Accountability and informing public policy

The Institute will:

- 1. expand the breadth and depth of scientific knowledge into gambling;
- 2. promote or direct research in those priorities and areas identified as part of the stakeholder priority action plan;
- 3. develop research capacity in the Partner Universities;
- 4. sponsor research that is peer reviewed and of the highest academic quality;
- 5. facilitate the transfer of knowledge and information to stakeholders, which includes, among other activities, maintaining a library collection;
- 6. forge strong collaborative links with stakeholders that include, but are not limited to, national and international scholars, organizations involved in gambling research and studies, policymakers, government, gaming providers, and problem gambling treatment providers;
- 7. provide education about current knowledge through research publications, reporting of research results, and knowledge translation strategies; and
- 8. identify and pursue other potential funding sources.

Core Businesses

- 1. Develop and promote gambling-related research and disseminate results.
- 2. Develop and sustain gambling-related research infrastructure.
- 3. Establish and encourage national and international gamblingrelated research linkages.
- 4. Establish and efficiently conduct gambling-related research administration.

INSTITUTE BOARD



The Institute is governed and managed by an eightmember Board consisting of two directors appointed by and from each Partner University, an external member appointed by the Minister of Finance, and an external Board Chair appointed by the Vice Presidents, Research, of the Partner Universities. The **Executive Director serves** as an advisory role on the Board. [For biographical information, see 'Board of Directors,' page 35]

Back row: Dr. Séamus O'Shea, Dr. Cam Wild

Middle Row: Dr. Chris Nicol, Berenika Kienc, Dr. Anna Lund

Front row: Rhys Stevens (Librarian & Information Specialist), Glenda Wong (Executive

Director), Dr. Tom Strong, Dr. Jenny Godley

GAMBLING RESEARCH THE PARTNER UNIVER



AT SITIES

REFLECTIONS ON MAKING AN IMPACT

Dr. Nady el-Guebaly, Research Director (April 1 – June 30, 2018)

In the current funding agreement with the Government of Alberta, the Institute's focus has been on the sustenance of strategic priorities, development of a high impact project, and the anticipation of the continued evolution of gambling activities.

SUSTENANCE OF FUNDING FOR STRATEGIC PRIORITIES

The Institute continues to enjoy many high quality applications for our graduate scholarship program. Selecting only ten to fourteen candidates from among the qualified applicants is becoming a challenging task. Our main criteria has been to respond to stakeholders' priorities and maintenance of available research across the Universities of Alberta, Calgary, and Lethbridge. The students' presentations at the annual Banff meetings are a testimony of the range and quality of their contributions.

• DEVELOPMENT OF A HIGH IMPACT PROJECT: THE AGRI NATIONAL PROJECT (ANP)

Based on the concepts developed last year, 2018-19 saw the operationalization and funding of the peer-reviewed project "Gambling and Problem Gambling in Canada: A National Project." The Institute also secured project funding partnerships with the Canadian Consortium of Gambling Research, the Canadian Centre on Substance Abuse's Lower-Risk Gambling National Project, and Gambling Research Exchange Ontario. Statistics Canada is involved with surveying the national aspects of gambling activities while the survey research firm of Leger will undertake a more detailed investigation of an interprovincial sample of respondents. The first national multipronged survey of the field is currently well on its way.



EVOLUTION OF GAMBLING ACTIVITIES

Institute-funded investigators constantly monitored new developments in the gambling field. Of major interest was the expanding access to Internet gambling and the increasing fusion of gaming and gambling in new products which are especially attractive to adolescents and young adults. The inclusion of Gaming Disorder as a diagnostic category in WHO's ICD-11 is fueling a renewed interest in this field.

Dr. Nady el-Guebaly, MD

UNIVERSITY OF ALBERTA

Dr. Fiona Nicoll, Research Coordinator



Dr. Fiona Nicoll, Ph.D., was appointed as the Alberta **Gambling Research Coordinator** at the University of Alberta on April 1, 2018 and has held the Institute Chair in Gambling at the University of Alberta since July, 2016. Dr. Nicoll holds a Ph.D. in Cultural Studies from the University of Melbourne and is an Associate Professor in the **Department of Political Science** at the University of Alberta. Dr. Nicoll has been publishing on cultural aspects of gambling spaces, products, and policies for over a decade.

Dr Nicoll's research interests include intersections of finance and gambling, the "pokie lounge" as a space of neoliberal governance, Indigenous gambling, and Native American iconography in electronic gaming machine design.

Capacity Building and Sustainability Activities at the University of Alberta

Social media communications have been an important focus with the establishment of dedicated Twitter and Facebook accounts to share credible public media information and research digests related to gambling across and beyond the university community. This year also saw the creation of an open access journal of *Critical Gambling Studies*. The blog and website feature short, topical reports on current issues in gambling regulation, ethics and methods and three special issues are planned, respectively dedicated to gambling and philosophy, the legacies and contemporary relevance of B. F. Skinner's arguments in Beyond Freedom and Dignity and early career researchers on gambling.

Research Activities

Dr. Garry Smith's collaboration with Dr. Nerilee Hing at Central Queensland University produced an article in the *Journal of Clinical Medicine* based on data collected from gamblers in Alberta and a report for stakeholders will be delivered early in 2020. In addition to working on the casino patron survey for the ANP, Dr Nicoll published a monograph, *Gambling in Everyday Life: Spaces, Moments and Products of Enjoyment* with Routledge and a soleauthored article on Indigenous spaces of gambling published in the *Journal of Law and Social Policy*.

UNIVERSITY OF CALGARY

Dr. David Hodgins, Research Coordinator

Dr. David C. Hodgins, Ph.D., is a
Professor in the Program in Clinical
Psychology in the Department
of Psychology, University
of Calgary. Dr. Hodgins is
the University of Calgary's
Research Coordinator for the
Alberta Gambling Research
Institute and is a registered
Clinical Psychologist in
Alberta.

Gambling research at the
University of Calgary continues
to make an impact as demonstrated
by the extremely active research

labs of Drs. Hodgins and Daniel McGrath. An average of twelve students and research assistants attend our joint biweekly research meetings. In addition, a number of other faculty members are conducting gambling projects as part of larger research programs. Seven University of Calgary masters and doctoral graduate students were supported by AGRI scholarships, and numerous research assistants and undergraduate students gained exposure to gambling research through the active small and large research projects. One doctoral student, Dr. Jennifer Swan, completed her degree and is now working with Alberta Health Services. Dr. Seema Mutti-Packer, our AGRI-funded post-doctoral fellow, was back from maternity leave to continue analyses of the Leisure, Lifestyle, and Lifecycle Project (LLLP) dataset. LLLP, a comprehensive, sevenyear longitudinal cohort project, was the AGRI flagship project for a number of years. Dr. Mutti-Packer helped to capture significant findings from this rich dataset, including understanding of the role of religiosity and alcohol use in gambling.

The International Behavioural Addictions and Impulse Control Disorder Network, a joint University of Calgary and University of São Paulo research collaboration, is now well established. Megan Cowie, one of our MSc students, travelled to Brazil on a MITAC fellowship to conduct a summer research project. With the support of an AGRI Team Development grant (the first award in this funding opportunity), Dr. Juan Tovar is spending three months in Calgary to

learn specific research methods. Our goal of having regular student exchanges focused on clinical gambling research is being met. Even more significant, this collaboration allows the clinical experience in one treatment centre to be shared world-wide though peer reviewed publications.

Drs. Hodgins and McGrath continue to have the opportunity to serve the community through responding to media requests for research-based information on gambling as well as speaking regularly at local and international conferences. It was also our university's turn to organize the scientific program at the annual AGRI conference. This is a very rewarding task as rarely do international experts decline the invitation to speak at the preeminent gambling research conference!

University of Calgary continued...

Dr. Daniel McGrath, Chair in Gambling Research

Dr. Daniel McGrath, Ph.D., is an Assistant Professor in the Department of Psychology and is the Alberta Gambling Research Institute's Chair in Gambling Research

at the University of Calgary. Dr. McGrath's research focuses on the behavioural pharmacology of substance use and gambling and his primary research interests involve studying the impact of addictive substances (e.g., tobacco and alcohol) on gambling outcomes and behaviour. Dr. McGrath's other interests include underlying motives for gambling as well as cognitive biases associated with disordered gambling.

Over the course of 2018-19, Dr. McGrath completed his final year as the Alberta Gambling Research Institute Research Chair at the University of Calgary. This year saw the continuation of a number of ongoing research projects as well as the start of several more. First, our team completed a large AGRI-funded project examining psychological characteristics associated with attentional biases in disordered gambling. In addition, several other eye-tracking experiments were completed or continued. For instance, Emma Ritchie completed her M.Sc thesis in which she examined the effects of alcohol exposure on cross-cue reactivity in gamblers who drink. In addition, another AGRI funded project looking at the relative strength of attentional biases for gambling versus other natural rewards was also started this past year. Aside from eye-tracking studies, the lab has also been actively conducting research on co-morbid addiction and behavioral pharmacology designs with gamblers. This past year saw the completion of a dual-site project with Dr. Sherry Stewart's laboratory at Dalhousie University. This experiment explored sex differences in cross-priming for gambling among stimulant users. A second experiment investigating the effects of gambling outcomes on drinking behavior has also progressed.

Dr. McGrath has continued to foster collaborations with numerous researchers. In particular, collaborations with researchers including Dr. Hermano Tavares, Dr. Michael Wohl, Dr. Kibeom Lee, and Dr. Tavis Campbell were further strengthened. Furthermore, major inroads were made this past year in increasing research on co-morbid cannabis use in gamblers. In the cannabis area, new collaborative relationships were established with Dr. Stephanie Borgland, Dr. Rob Tanguay, and Dr. Jacqueline Smith. These collaborations have also led to a formal research partnership with the Calgary Police Service. Finally, with the completion of the first stages of AGRI's National Project, several papers on the topic of comorbid use of marijuana and gambling are in currently in preparation.

Dr. Robert Williams, Research Coordinator



Dr. Robert Williams, Ph.D., is a Professor in the Faculty of Health Sciences, University of Lethbridge, and a Research Coordinator for the Alberta Gambling Research Institute. Dr. Williams teaches courses on gambling; provides frequent consultation to government, industry, the media, and public interest groups; and regularly gives expert witness testimony on the impacts of gambling.

In 2018-19, gambling research at the University of Lethbridge continued to involve faculty and students from a myriad of different academic disciplines. Departments represented included Sociology, Addictions Counselling, Psychology, Political Science, Neuroscience, and Public Health. In total there were approximately 15 to 20 people engaged in gambling research at the university. As in past years, the Gambling Research Group met monthly during the academic year and showcased the work of the

UNIVERSITY OF LETHBRIDGE

gambling researchers at the University of Lethbridge. This year the meetings were very capably organized by Ph.D. student Gillian Russell. Local AGLC GameSense advisors continue to attend University of Lethbridge monthly gambling research group meetings.

Several AGRI-funded research projects are ongoing. Of particular note is a comprehensive national study of gambling "Gambling and Problem Gambling in Canada: A National Study," that involves several AGRI researchers (Williams, Belanger, Christensen, el-Guebaly, Hodgins, McGrath, Nicoll, Smith, Stevens), which has received co-funding from the Canadian Consortium for Gambling Research, the Canadian Centre for Substance Abuse and Addiction, and Gambling Research Exchange Ontario. This is the largest and most comprehensive investigation of gambling ever undertaken in Canada. The project has ten main research goals, with the overarching objective being to comprehensively document what is known about the prevalence, pattern and impacts of gambling in Canada so as to better maximize its benefits and minimize its harms. The final report for this project is expected in 2020.

Dr. Darren Christensen, Chair in Gambling Research

Dr. Darren Christensen, Ph.D., is an Associate Professor in the Faculty of Health Sciences and is the Alberta Gambling Research Institute's Chair in Gambling Research at the University of Lethbridge. Dr. Christensen's research is focused on developing the best practices for behavioural and pharmacological treatments for gambling, psychometric evaluations of gambling tools, investigations of gambling etiology, evaluating the experiences of gambling venue workers, and reviewing the best practices of harm minimization measures. These studies provide opportunities for gamblers to receive treatment and for students to research issues relating to gambling.

Dr. Christensen's gambling research during the 2018-19 period focused on the promotion and management of his research projects, supervision of his graduate students, and manuscript development. Dr. Christensen's AGRI Research Chair at the University of Lethbridge ended in December 2018 but he continues an affiliation with the Institute as a senior research fellow. Dr. Christensen was recently awarded a fouryear University of Lethbridge Board of Governors Research Chair (Tier 2) in Addiction starting June, 2020. In 2018 he submitted a harm minimisation chapter to an international consortium examining responsible gambling. The book is currently in pre-production. Last year, Professor Simon Dymond from Swansea University contacted Dr. Christensen regarding his work using contingency management as a treatment for problem gambling. He wishes to use the same approach in the UK. Together, Dr. Christensen and Professor Dymond developed a proposal and, with Professor Henrietta Bowden-Jones from the National Problem Gambling Clinic, UK, they submitted the proposal to Gamble Aware, UK. The proposal is currently under review. Dr. Christensen has also submitted a request to AGLC to access historical de-identified precommitment information from Albertan VLTs (this was prior to a similar request from AGRI) which AGLC is considering. Dr. Christensen participates in the AGRI National Project and leads the Casino Patron Survey with Dr. Fiona Nicoll. His research continues to examine the efficacy of contingency management, Internet and faceto-face counselling, pharmacological

treatments, and imaging protocols.

RESEARCH ACTIVITY

MAJOR AND SMALL GRANTS

The Institute contributes to the development of the knowledge base in gambling-related research in a number of ways. An annual call for proposals is issued in May (with an end-of-June submission deadline) soliciting applications from researchers to address stakeholder-identified high-priority research topics as well as those identified by researchers themselves. The submissions are subjected to a rigorous peer review process which involves the critical review of proposals by external experts with related areas of expertise. This type of review process provides the most reliable means of ensuring that only the highest quality research submissions receive Institute funding.

Research Projects (new, ongoing, and completed in 2018-19)

THE FOLLOWING NEW RESEARCH GRANT PROPOSALS WERE APPROVED IN THE 2018-19 GRANT FUNDING CYCLE:

- [#85 Major Grant 2018-19] Development of an
 Ecologically Valid Non-Human Primate Model of
 Gambling Dr. Jean-Baptiste Leca (U of Lethbridge),
 Dr. Robert J. Williams (U of Lethbridge) & Dr. James
 Sanders (U of Lethbridge) [Priority: Treatment and
 Stigma]
- [#86 Major Grant 2018-19] Lottery Winnings and Entrepreneurship – Dr. Barry Scholnick (U of Alberta) [Priority: Public Policy]

AS OF MARCH 31, 2019, THE FOLLOWING RESEARCH PROJECTS WERE ONGOING AS FUNDING WAS PROVIDED IN PREVIOUS GRANT CYCLES:

- [#68 Major Grant 2014-15] Family Study of Executive Functioning Deficits in Gambling Disorder – Dr.
 Vina Goghari (U of Calgary) [Priorities: Longitudinal Research, Treatment and Stigma]
- [#69 Major Grant 2014-15] Naltrexone-Imaging Study
 Dr. Darren Christensen (U of Lethbridge) [Priority:
 Treatment and Stigma]
- [#73 Major Grant 2014-15] Gambling Disorder
 vs. Alcohol Use Disorder: Comparing Treatment
 Outcomes with Congruence Couple Therapy –
 Dr. Bonnie K. Lee & Dr. Darren Christensen (U of
 Lethbridge) [Priority: Treatment and Stigma]
- [#74 Major Grant 2015-16] Reducing the Allure of Winning Cues in Gambling – Dr. Marcia Spetch (U of Alberta) [Priorities: Public Policy, Treatment and Stigma]
- [#75 Major Grant 2015-16] Implications of Integration
 of Mental Health and Addiction Systems for Problem
 Gambling Treatment: Case Studies of Alberta,
 Saskatchewan, and Ontario Dr. Darren Christensen
 & Dr. Gabriela Novotna (U of Lethbridge) [Priorities:
 Public Policy, Treatment and Stigma]
- [#76 Major Grant 2015-16] Towards Understanding Addiction Substitution: An Examination of Substituted vs. Recovered Gamblers – Dr. David Hodgins (U of Calgary) [Priorities: Longitudinal Research, Treatment and Stigma]
- [#77 Major Grant 2015-16] Identifying Psychological Factors that Are Predictive of Attentional Bias in Gamblers: An Eye-tracking Study – Dr. Daniel McGrath (U of Calgary) [Priority: Treatment and Stigma]
- [#79 Major Grant 2016-17] Gambling Responsibly:
 Measuring and Validating Responsible Gambling
 Behaviours Amongst Regular Gamblers in Alberta
 – Dr. Garry Smith (U of Alberta) [Priorities: Public
 Policy, Internet Gambling, and Treatment and
 Stigma]

- [#80 Major Grant 2016-17] Do Social Casino Games
 Encourage Gambling? An Experimental Approach

 Dr. David C. Hodgins, Hyoun S. Kim, Dr. Daniel
 McGrath (U of Calgary); Dr. Matthew J. Rockloff
 (Central Queensland U); Dr. Michael Wohl (Carleton U) [Priority: Internet Gambling]
- [#82 Major Grant 2017-18] Gambling in the
 Workplace: Characteristics and Experiences –
 Dr. Rebecca Hudson Breen (U of Alberta) & Dr.
 James Sanders (U of Lethbridge) [Priorities: Internet
 Gambling, Crime and Gambling]
- [#83 Major Grant 2017-18] Pop-up Messages
 for Internet Gambling: An Experimental Study
 Examining the Efficacy of Fear Appraisals Dr. David
 C. Hodgins, Dr. Seema Mutti-Packer, Hyoun S. Kim,
 Dr. Daniel McGrath (U of Calgary); Dr. Matthew J.
 Rockloff (Central Queensland U); Dr. Michael Wohl
 (Carleton U) [Priority: Internet Gambling]
- [#84 Major Grant 2017-18] From Motivation to Compulsion: The Neural Bases of Disordered Gambling Explored in a Rodent Model – Dr. David Euston (U of Lethbridge) [Priority: Treatment and Stigma]
- [#S44 Small Grant 2017-18] Gambling Risk-Taking Behavior in the Aftermath of Broken Promises: The Role of Stress – Dr. Yannick Griep & Dr. Daniel McGrath (U of Calgary) [Priority: Treatment and Stigma]
- [#S46 Small Grant 2017-18] Selective Memory in Gamblers: An Autobiographical Memory Approach
 Dr. Norman R. Brown (U of Alberta) [Priority: Treatment and Stigma]

AS OF MARCH 31, 2019, THE FOLLOWING RESEARCH PROJECTS WERE COMPLETED IN 2018-19:

- [#70 Major Grant 2014-15] Neural Mechanisms of Gambling – Dr. David R. Euston (U of Lethbridge)
 [Priority: Treatment and Stigma]
- [#78 Major Grant 2015-16] Examining the Relationship between Problem Gambling and Problematic Video Game Use – Dr. James Sanders (U of Lethbridge) [Priorities: Internet Gambling, Treatment and Stigma]
- [#S43 Small Grant 2016-17] Sex Differences in Cross-Priming for Gambling Among Stimulant Users

 Dr. Daniel McGrath (U of Calgary) [Priority:
 Treatment and Stigma]

 [#S45 Small Grant 2017-18] Disordered Gambling and Bankruptcy Law: Research-Informed Practice for Insolvency Professionals – Dr. Anna Lund (U of Alberta) [Priorities: Public Policy, Treatment and Stigma, Crime and Gambling]

STRATEGIC & COLLABORATIVE INITIATIVES GRANTS

To support initiatives that would typically build capacity to address high-priority topics (not taken up by existing complement of researchers). Areas of focus are Board identified and engaged via Request For Proposal process. The approval process is by the full Board.

GAMBLING AND PROBLEM GAMBLING IN CANADA: A NATIONAL STUDY [AGRI National Project]

[Strategic Research Grant 2018-19] Gambling and Problem Gambling in Canada: A National Study – Dr. Robert J. Williams, (U of Lethbridge), Dr. Carrie Leonard (U of Lethbridge), Dr. Darren R. Christensen (U of Lethbridge), Dr. Nady A. el-Guebaly (U of Calgary), Dr. David C. Hodgins (U of Calgary). Dr. Daniel S. McGrath (U of Calgary); Dr. Fiona Nicoll (U of Alberta), Dr. Garry J. Smith (U of Alberta), & Mr. Rhys M.G. Stevens (U of Lethbridge) [Priorities: Public Policy, Indigenous/First Nations, Longitudinal Research, Treatment and Stigma]

This strategic and collaborative grant is anticipated to be one of the largest and most comprehensive national investigations of gambling ever conducted in Canada. It is being undertaken by a team of ten Institute researchers from the consortium universities and is being funded by the Alberta Gambling Research Institute (AGRI), the Canadian Consortium for Gambling Research (CCGR), the Canadian Centre for Substance Abuse and Addiction, and Gambling Research Exchange Ontario.

Website: https://www.ucalgary.ca/research/ national-gambling-study/

Dr. Carrie Leonard, Project Manager, AGRI National Project

Dr. Carrie A. Leonard is currently serving as the Project Coordinator for the AGRI National Project "Gambling and Problem Gambling in Canada: A National Study." Her research interests include the spectrum of individual differences, cognitive and social, and the role those of those factors in erroneous belief formation and correction. Dr. Leonard's recent publications include: "Fallacious beliefs: Gambling specific and belief in the paranormal"

(2018), "The relationship between gambling fallacies and problem gambling" (2016), "Gambling Fallacies: What are they and how are they best measured?" (2015), and "Characteristics of good poker players" (2015).

The 2018-19 fiscal year marked the successful implementation of multiple AGRI National Project elements. The first of which was the Rapid Response Gambling Module, an assessment of gambling engagement and

problematic gambling behaviour. This module, the product of successful collaborations between AGRI researchers, CCGR and Statistics Canada, was administered in concert with the Canadian Community Health Survey (CCHS). Data analysis is planned for summer 2019.

The second project element implemented during this fiscal year was the Online Panel Cohort Study. This study survey was designed to extend the Statistics Canada project element by obtaining more comprehensive demographic, comorbidity, and gambling information in a longitudinal design. Baseline data was collected from ~10,000 interprovincial participants in the fall of 2018. The follow-up survey data collection is expected to begin in late August, 2019.

Considerable progress was also made on the third element the National Project during the fiscal year. The third element is expected to provide a more qualitative context for the National Project by garnering information from the unique perspectives of four Key Informant groups: gambling stakeholders, Indigenous leaders, casino patrons, and problem gamblers in treatment. By March, 2019, the procedures for each of these key informant studies had been formalized, and with ethics approved, we anticipate data collection for these projects to begin posthaste.

OTHER GRANT OPPORTUNITIES

Leveraging Grants aim to enable researchers with non-AGRI funding to augment projects with a gambling-related component in stakeholder-identified high-priority areas.

Team Development Grants provide an opportunity for joint proposals aiming to support the development of multi- and inter-disciplinary academic teams among Partner Universities, nationally, internationally, and with other stakeholders.

[Team Development Grant 2018-19]
 Towards a Transdiagnostic Etiological and Treatment Model of Gambling Disorder and Addiction: An International Multi-Disciplinary Collaboration - Dr.
 David C. Hodgins (U of Calgary), Hyoun S. Kim (U of Calgary), Dr. Hermano Tavares (U of Sao Paulo), Dr. Andre Malbergier (U of Sao Paulo), Dr. Daniel S. McGrath (U of Calgary), Dr. Kristin von Ranson (U of Calgary) [Priority: Treatment and Stigma]

Impact Grants provide support for special purpose initiatives that contribute to addressing Institute priorities other than primary research (e.g., research data repository, knowledge transfer/translation initiatives, outcome measurement, etc.).

More information on all grant types is available from the Institute 'Grant Opportunities' web page: www.abgamblinginstitute.ca/grants.

SCHOLARSHIP AND RESEARCH ALLOWANCE AWARDS

To foster young researcher involvement in gambling-related research, a multitiered (doctoral and graduate level in addition to a 'top-up' opportunity for students receiving other major external awards) scholarship and research allowance program promotes gambling-related research to promising new scholars.

THE FOLLOWING FOURTEEN SCHOLARSHIPS WERE AWARDED IN 2018-19:

 Briana Cassetta, Doctoral, Clinical Psychology, University of Calgary.

Identify mediating factors to explain elevated rates of disordered gambling found in schizophrenics. [Priority: **Treatment and Stigma**]

 Megan Cowie, Master's, Clinical Psychology, University of Calgary.

Research the impact of motives on the relationship between the social context of gambling and gambling problems and extending her research by examining motives within the context of nonsuicidal self-injury (NSSI). [Priorities: **Public Policy**; **Longitudinal Research**]

 Chelsea Fitzpatrick, Master's, Psychology, University of Calgary.

Determine if gamblers (specifically poker players) compared to non-poker playing controls, attribute higher incentive value toward poker cues above that of positive affective stimuli by using eye-tracking. [Priority: **Treatment and Stigma**]

 Chang Lu, Doctoral, Business, University of Alberta.

Conduct ethnographic observations in indigenous communities, as a way to understand indigenous culture, history and worldviews and in doing so, obtain a solid foundation to understand the actions that First Nations took to enter the gambling field. [Priorities: Indigenous/First Nations]

 Dallas Novakowski, Doctoral, Business, University of Calgary.

Examine the role of general risk propensity using archival measures of gambling and dangerous driving to investigate whether the factor of general risk propensity can be attributed to shared method variance from self-report risk measures. [Priority: **Public Policy**]

 Samuel Ofori-Dei, Doctoral, Health Sciences, University of Lethbridge.

Develop a multifactor model that explains the interactive effects of individual and community level factors on the relationship between gambling availability/accessibility and gambling behaviours. [Priority: **Public Policy**]

 Jennifer Prentice, Doctoral, Clinical Psychology, University of Calgary.

Examine the relationships between gambling involvement and perceived passive (e.g., social norms) and active (e.g., criticizing someone) negative

(i.e., stigmatizing) social influences in a population sample of high-school students. [Priorities: **Public Policy; Treatment and Stigma**]

 Sienna Randolph, Master's, Neuroscience, University of Lethbridge.

Reveal how wins and losses are encoded in the brains of rats and how dopamine in different neural circuits activate during risk-taking with a focus on two brains areas which have been strongly implicated in problem gamblers. [Priority: **Treatment and Stigma**]

 Emma Ritchie, Master's, Psychology, University of Calgary.

Explore the relationship between gambling and alcohol use by focusing on two constructs common in the addictions literature: attentional biases and cross-cue reactivity. [Priority: **Treatment and Stigma**]

 Gillian Russell, Doctoral, Psychology, University of Lethbridge.

Understand the relationship between implicit memory associations and gambling behaviour longitudinally in both adolescents and adults. [Priorities: Public Policy; Longitudinal Research; Treatment and Stigma]

 Magdalen Schluter, Doctoral, Psychology, University of Calgary.

Investigate the potential role of Delayed Reward Discounting in the maintenance of disordered gambling and the impact of substance abuse on this relationship. [Priority: **Treatment and Stigma**]

 Maryam Sharif-Razi, Doctoral, Psychology, University of Calgary.

Examine the association between early trauma and problematic gambling behaviours in adolescents, with a focus on what mediating factors might explain this relationship. [Priorities: Longitudinal Research; Treatment and Stigma]

 Kathleen Ward, Master's, Neuroscience, University of Lethbridge.

Look at two forms of impulsivity; 1) act without thinking and 2) short-sighted decisions, to see which is better able to predict gambling motivation. [Priority: **Treatment and Stigma**]

 Nathan Wispinski, Doctoral, Psychology, University of Alberta.

Explore the fundamental process behind decisionmaking and leveraging it to make better decisions. [Priorities: Longitudinal Research; Treatment and Stigma]





Rhys Stevens, MLIS, is a
Librarian III at the University of
Lethbridge Library. His primary
responsibility is Librarian &
Information Specialist for the
Alberta Gambling Research
Institute (AGRI). He is also
subject liaison librarian for
Geography, Maps & Government
Documents, Anthropology, and
Spatial/Numeric Data.

INSTITUTE LIBRARY & WEB SITE OVERVIEW 2018-19

Over the course of fiscal 2018-19 the Institute's three affiliated university libraries (U. of Lethbridge, U. of Calgary, and U. of Alberta) selected and purchased approximately \$20,000 of materials in support of gambling-related research at their institutions. Specifically, \$9,000 was allocated to U. of Lethbridge, \$5,500 to U. of Alberta and \$5,500 to U. of Calgary. Purchased materials included electronic journal title subscriptions, E-books, print books, and audio-visual resources.

In addition to supporting collection building, the Institute Librarian provided assistance with 35 specific reference requests, updated research guides on gambling-related topics, digitized and archived a variety of significant gambling-related publications, maintained the Institute web site, authored newsletter articles, and assisted with knowledge transfer/translation services.

The Institute web site functioned as the primary point of access for information about the Institute and its ongoing research activities.

A related web site was created for the Institute's strategic research project entitled "Gambling and Problem Gambling in Canada: A National Study." Citations, abstracts, digital object identifiers (DOIs) and project-relevant details were added to grant web pages as new research publications and presentations were published. The Institute's Twitter account was used for sending notifications about Institute activities and developments in the field of gambling research.

Lastly, online spreadsheets detailing worldwide gambling prevalence studies and the Institute's 144 funded grants were kept up-to-date.

CONFERENCE 2018



Current Issues in Gambling Research

April 12-14, 2018

The Institute's 17th Annual Conference featured both established to up-and-coming gambling researchers from Canada, United States, Australia, and Europe who presented ideas about contemporary and cutting-edge topics in gambling research. The conference attracted researchers, policy makers, and treatment providers. At the conference welcome reception, two Albertan researchers were honoured for their remarkable contributions to gambling research. The Institute's Research Director, Dr. Nady el-Guebaly, was recognized for his appointment as a Member of the Order of Canada for distinguished leadership on addictions research and treatment. Dr. Garry Smith was recognized for his longstanding contributions to gambling research in Alberta and his foundational contributions to the establishment of the Institute.

CONFERENCE 2018 RESEARCH POSTER AWARD

The winner of the research poster award went to Ms. Kristy Kowatch from Lakehead University, Thunder Bay, ON, for her poster "Review of Gambling Behaviours in Indigenous Populations within Canada." Ms. Kowatch's poster was chosen from among 39 posters representing research undertaken in Sweden, United States, and numerous Canadian provinces.





CONFERENCE 2019

BLURREDE Research

Blurred Lines in Gambling Research

March 28-30, 2019

The theme of the Institute's 2019 Conference was "Blurred Lines in Gambling Research" which highlighted the shifting dynamics of gambling. Presentations explored issues such as the blurring of gaming and gambling, the blurring of the focus on harms versus addiction and the blurring of traditional face-to-face treatment and self-directed online interventions. Speakers from Australia, Brazil, New Zealand, Europe and Canada presented sessions relevant to researchers, treatment providers, policy makers, and industry staff.

CONFERENCE 2019 RESEARCH POSTER AWARD

The winner of the research poster award was Ms. Alana Guidry from the University of Calgary for her poster entitled "Gaming or Gambling? Assessing the Correlates of Problematic Social Casino Gaming Use." Ms. Guidry's poster was chosen from among 38 posters representing research undertaken in Brazil, Spain and numerous Canadian provinces.

RESEARCH PUBLICATIONS

An important aspect of research is the communication of peer-reviewed research findings through publication in the scholarly literature. Following is a list of Institute-funded research published from April 1, 2018, to March 31, 2019:

Abbott, M., Binde, P., Hodgins, D., Korn, D., Pereira, A., Volberg, R., Williams, R., & Ontario Problem Gambling Research Centre. (2018).

Conceptual framework of harmful gambling: An international collaboration (3rd ed.). Guelph, ON: Ontario Problem Gambling Research Centre (OPGRC). https://doi.org/10.33684/CFHG3.en

Belanger, Y. (2018). First
nations gaming in Canada:
Gauging past and ongoing
development. *Journal of Law and Social Policy, 30*, 175-184. https://digitalcommons.osgoode.yorku.
ca/ilsp/vol30/iss1/9

Christensen, D. R. (2018). A review of opioid-based treatments for gambling disorder: An examination of treatment outcomes, cravings, and individual differences.

International Gambling Studies, 18(2), 286-309. https://doi.org/10.1080/14459795.2018.1470662

Christensen, D. R., Williams, R. J., & Ofori-Dei, S. M. (2019). The multidimensional structure of problem gambling: An evaluation of four gambling categorization instruments from an international online survey of gamblers.

Journal of Gambling Studies. https://doi.org/10.1007/s10899-019-09832-5

Christensen, D. R., Witcher,
C. S. G., Leighton, T.,
Hudson-Breen, R., & Ofori-Dei,
S. (2018). Piloting the addition
of contingency management to
best practice counselling as an
adjunct treatment for rural and
remote disordered gamblers:
Study protocol. *BMJ Open*,
8(4). https://doi.org/10.1136/bmjopen-2017-018804

Johnson, M. R. (2019). *The unpredictability of gameplay.*New York: Bloomsbury
Academic.

Joyce, K. M., Hudson, A.,
O'Connor, R. M., Goldstein,
A. L., Ellery, M., McGrath, D.
S., Perrot, T. S. & Stewart, S.
H. (2019). Retrospective and prospective assessments of gambling-related behaviors across the female menstrual cycle. *Journal of Behavioral Addictions*, 8(1). http://dx.doi.org/10.1556/2006.7.2018.133

Kim, H. S., Cassetta, B. D.,
Hodgins, D. C., McGrath,
D. S., Tomfohr-Madsen, L.
M., & Tavares, H. (2018).
Comorbid addictive behaviors
in disordered gamblers with
psychosis. *Brazilian Journal of Psychiatry, 40*(4). http://dx.doi.
org/10.1590/1516-4446-2017-2307

Kim, H. S., Rash, C. L., & McGrath, D. S. (2018). The dishonest gambler: Low HEXACO honesty-humility and gambling severity in a community sample of gamblers. *Personality and Mental Health*, *12*(4), 355-364. https://doi.org/10.1002/pmh.1433

Kim, H. S., von Ranson, K. M., Hodgins, D. C., McGrath, D. S., & Tavares, H. (2018). Demographic, psychiatric, and personality correlates of adults seeking treatment for disordered gambling with a comorbid binge/ purge type eating disorder. **European Eating Disorders Review, 26**(5), 508-518. https://doi.org/10.1002/erv.2606

Leonard, C. A., & Williams, R. J. (2019). Fallacious beliefs: Gambling specific and belief in the paranormal. *Canadian Journal of Behavioural Science*, *51*(1), 1-11. https://doi.org/10.1037/cbs0000113

Ludvig, E. A., Madan, C. R., McMillan, N., Xu, Y., & Spetch, M. L. (2018). Living near the edge: How extreme outcomes and their neighbors drive risky choice. *Journal of Experimental Psychology: General, 147*(12), 1905-1918. https://doi.org/10.1037/xge0000414

Madan, C. R., Ludvig, E. A., & Spetch, M. L. (2019).
Comparative inspiration: From puzzles with pigeons to novel discoveries with humans in risky choice. *Behavioural Processes, 160,* 10-19. https://doi.org/10.1016/j.beproc.2018.12.009

Mazar, A., Williams, R. J., Stanek, E. J., Zorn, M., & Volberg, R. A. (2018). The importance of friends and family to recreational gambling, atrisk gambling, and problem gambling. *BMC Public Health*, 18(1), 1080. https://doi. org/10.1186/s12889-018-5988-2

McGrath, D. S., Kim, H. S., Hodgins, D. C., Novitsky, C., & Tavares, H. (2018). Who are the anonymous? Involvement and predictors of gamblers anonymous attendance among disordered gamblers presenting for treatment. *Journal of Gambling Studies, 34*(4), 1423-1434. https://doi.org/10.1007/s10899-018-9774-y

McGrath, D. S., Neilson, T.,
Lee, K., Rash, C., &
Mandana, M. (2018). Associations
between the HEXACO model
of personality and gambling
involvement, motivations to
gamble, and gambling severity
in young adult gamblers. *Journal*of Behavioral Addictions,
7(2), 392-400. https://doi.
org/10.1556/2006.7.2018.29

Nicoll, F. (2018). Beyond the figure of the problem gambler: Locating race and sovereignty struggles in everyday cultural spaces of gambling.

Journal of Law and Social Policy, 30, 127-149. https://digitalcommons.osgoode.yorku.ca/ilsp/vol30/iss1/7/

Nicoll, F., & Johnson, M. R. (2018). "I've always been outspoken on what I think can be improved": An Interview with Dr. Garry J. Smith. *Journal of Law and Social Policy, 30*, 207-219. https://digitalcommons.osgoode.yorku.ca/jlsp/vol30/iss1/13/

Rodda, S. N., Hing, N., Hodgins, D. C., Cheetham, A., Dickins, M., & Lubman, D. I. (2018). Behaviour change strategies for problem gambling: An analysis of online posts. *International Gambling Studies*, *18*(3), 420-438. https://doi.org/10.1080/14459795.2018.1432670

Rumpf, H.-J., Achab, S.,
Billieux, J., Bowden-Jones,
H., Carragher, N., Demetrovics,
Z., Higuchi, S., King, D. L., Mann,
K., Potenza, M., Saunders, J.
B., Abbott, M., Ambekar, A.,
Aricak, O. T., Assanangkornchai,
S., Bahar, N., Borges, G.,
Brand, M., Chan, E. M., Chung,
T., Derevensky, J., El Kashef,
A., Farrell, M., Fineberg, N.

A., Gandin, C., Gentile, D. A., Griffiths, M. D., Goudriaan, A. E., Grall-Bronnec, M., Hao, W., Hodgins, D. C., Ip, P., Király, O., Lee, H. K., Kuss, D., Lemmens, J. S., Long, J., Lopez-Fernandez, O., Mihara, S., Petry, N. M., Pontes, H. M., Rahimi-Movaghar, A., Rehbein, F., Rehm, J., Scafato, E., Sharma, M., Spritzer, D., Stein, D. J., Tam, P., Weinstein, A., Wittchen, H., Wölfling, K., Zullino, D., & Poznyak. V. (2018). Including gaming disorder in the ICD-11: The need to do so from a clinical and public health perspective. Journal of Behavioral Addictions, 7(3), 556-561. https://doi. org/10.1556/2006.7.2018.59

Russell, G. E. H., Williams, R. J., & Sanders, J. L. (2019). The relationship between memory associations, gambling involvement, and problem gambling. *Addictive Behaviors*, *92*, 47-52. https://doi.org/10.1016/j.addbeh.2018.12.015

Sanders, J., & Williams, R. (2019).
The relationship between
video gaming, gambling, and
problematic levels of video
gaming and gambling. *Journal of Gambling Studies, 35*(2), 559-569.
https://doi.org/10.1007/s10899-018-9798-3

Schluter, M. G., Kim, H. S., Poole, J. C., Hodgins, D. C., McGrath, D. S., Dobson, K. S., & Taveres, H. (2019). Gambling-related cognitive distortions mediate the relationship between depression and disordered gambling severity. *Addictive Behaviors*, *90*, 318-323. https://doi.org/10.1016/j.addbeh.2018.11.038

Shakeel, M. K., Hodgins, D. C., & Goghari, V. M. (2019). A comparison of self-reported impulsivity in gambling disorder and bipolar disorder. *Journal of Gambling Studies, 35*(1), 339-350. https://doi.org/10.1007/s10899-018-9808-5

Sharif-Razi, M., Hodgins, D.
C., & Goghari, V. M. (2019).
Reactive and proactive control mechanisms of response inhibition in gambling disorder.

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in Massachusetts: 2018.
Amherst, MA: School of Public
Health and Health Sciences,
University of Massachusetts
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SOCIOECONOMIC%20IMPACTS
Executive%20Summary_0.pdf

SEIGMA Research Team. (2019).

Social and economic impacts
of Plainridge Park Casino: 2018.
Amherst, MA: School of Public
Health and Health Sciences,
University of Massachusetts
Amherst.

NEWSLETTER

Following is a list of the contents of the Institute's Gambling Research Reveals' newsletter published from April 1, 2018 to March 31, 2019:

Spring 2018 >

Feature articles:

- Online Version of Alberta's Voluntary Casino Self-Exclusion Intervention Evaluated [page 1]
- Dr. Rob Williams Initiates Plans for Comprehensive National Study of Gambling [page 3]
- Dr. Aaron Gruber Discusses Near-Misses at U. of Lethbridge Gambling Research Group Event [page 5]
- 2018-19 Graduate Student Scholarship Program [page 6]





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< Summer 2018

Feature articles:

- Conference 2018 Showcases Latest Academic Research from Alberta and around the World [page 1]
- Dr. Garry Smith Recognized at Conference for His Outstanding Contributions to Gambling Research [page 4]
- From the Archives...Legendary Alberta Golden Bears Sportsman Garry Smith [page 4]
- · Selected Research Publications Garry J. Smith [page 6]
- Tribute to Garry Smith from Friends & Colleagues [page 7]

Fall 2018 >

Feature articles:

- Loot Boxes: A Striking New Element in the Ongoing Gamblification of Video Games [page 1]
- From the Library: World Health Organization (WHO) Adds Gaming Disorder to New International Classification of Diseases, ICD-11 [page 4]
- 2018-2019 Scholarship Recipients [page 6]





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Feature articles:

Winter 2019

- Institute Conference 2019: Blurred Lines in Gambling Research [page 1]
- Gambling Research "Getting the Word Out" [page 3]
- · Research Grants 2018-19 [page 4]
- Annual Report 2017-18 Now Available! [page 5]

CONSULTING AND COLLABORATING: A COCK DINATED A PPROACH In 2018-19

In 2018-19, the Institute was a participating organization in the following:

- Responsible Gambling Advisory Committee (RGAC), Alberta Gaming & Liquor Commission
 Participants Dr. Nady el-Guebaly and Glenda Wong.
- Interprovincial Canadian Consortium for Gambling Research (CCGR) - Participants Dr. Nady el-Guebaly and Glenda Wong.
- 2018 Insight Responsible Gambling
 Symposium (September 25, 2018), Alberta
 Gaming, Liquor & Cannabis Commission

 Participants invited to the Edmonton
 symposium were Institute-affiliated Research
 Coordinators, Gambling Chairs, Librarian, and
 Board Members. The focus of the symposium was on the Generation Z (ages 12-25)
 population with an aim of sparking discussion with the goal of understanding what the evolving nature of gaming and gambling means for responsible gambling initiatives.

In 2018-19, Institute Research Coordinators consulted in the following:

- National Low Risk Gambling Guidelines, Canadian Centre on Substance Use and Addiction – Participant Dr. David Hodgins.
- Gambling Research Australia (online gambling)
 Participant Dr. Rob Williams.

AUDITED FINANCIAL STATEMENTS

FOR THE YEAR ENDED MARCH 31, 2019

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- **26** Statement of Operations
- **27** Statement of Cash Flows
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- 29 Notes to the Financial Statements
- 34 Schedule of Expenses

To the Directors of Alberta Gambling Research Institute:

Opinion

We have audited the financial statements of Alberta Gambling Research Institute (the "Institute"), which comprise the statement of financial position as at March 31, 2019, and the statements of operations (including schedule 1), change in net financial assets and cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Institute as at March 31, 2019, and the results of its operations and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Institute in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Institute's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Institute or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Institute's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the
 circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Institute's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Institute's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Institute to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Calgary, Alberta

July 26, 2019

MWP LLP
Chartered Professional Accountants

Chartered Professional Accountants

1500, 640 - 5th Avenue SW, Calgary, Alberta, T2P 3G4, Phone: (403) 263-3385, 1 (877) 500-0792



AS AT MARCH 31

STATEMENT OF FINANCIAL POSITION

	2019	2018
FINANCIAL ASSETS		
Cash and cash equivalents (Note 4)	\$ 835,053/	\$ 711,495
Grants receivable (Note 3)		375,000
Unexpended funds receivable (Note 5)	18,524	15,294
	853,577	1,101,789
LIABILITIES		
Accounts payable and accrued liabilities	81,483	37,381
NET FINANCIAL ASSETS	772,094	1,064,408
NON-FINANCIAL ASSETS		
Prepaid expenses	4,000	4,000
NET ASSETS	776,094	1,068,40
NET ASSETS		
Accumulated surplus	1,068,408	1,623,398
Annual deficit	(292,314)	(554,990)

The accompanying notes and schedule are part of these financial statements

Approved by the board:

Original signed by:

Dr. Seamus O'Shea

Board Chair

Signature

Position

B. Kienc Signature Audit Committee Vice Chair

Position

STATEMENT OF OPERATIONS

	2019 BUDGET (Note 9)	2019 ACTUAL	2018 ACTUAL
REVENUES			
Government transfers	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000
Investment income	3,000		11,560
Other/unexpended funds recovered	7,500	18,524	15,294
EXPENSES (Schedule 1)	\$ 1,510,500	\$ 1,518,524	\$ 1,526,854
Research	\$ 1,176,667	\$ 1,326,433	\$ 1,586,900
Infrastructure and library	140,000	120,000	140,000
Research linkages	80,000	99,260	89,314
Research administration	321,000	265,145	265,630
	×\$ 1,717,667	\$1,810,838	\$ 2 ,081,844
ANNUAL DEFICIT	\$ (207,167)	\$ (292,314)	\$ (554,990)

The accompanying notes and schedule are part of these financial statements.

STATEMENT OF CASH FLOWS

	2019	2018
OPERATING TRANSACTIONS		
Contributions from the Ministry of Treasury Board and Finance	\$ 1,875,000	\$ 1,125,000
Unexpended funds	15,294/	24,392
Research expenditures	(1,345,933)	(1,591,901)
Infrastructure and library expenditures	(120,000)	(140,000)
Research linkages expenditures	(64,610)	(84,064)
Research administration expenditures	(236,193)	(264,060)
CASH USED FOR OPERATING TRANSACTIONS	123,558	(930,633)
CASH AND CASH EQUIVALENTS,		
BEGINNING OF YEAR	711,495	1,642,128
CASH AND CASH EQUIVALENTS,		
END OF YEAR	\$ 835,053	\$ 711,495

The accompanying notes and schedule are part of these financial statements.

STATEMENT OF CHANGE IN NET FINANCIAL ASSETS

	2019 BUDGET	2019 ACTUAL	2018 ACTUAL
Annual deficit	\$ (207,167)	\$ (292,314)	\$ (554,990)
Change in prepaid expenses			5,250
Decrease in net financial assets	(207,167)	(292,314)	(549,740)
Net financial assets, beginning of year	1,064,408	1,064,408	1,614,148
Net financial assets, end of year	\$ 857,241	\$ 772,094	\$ 1,064,408

The accompanying notes and schedule are part of these financial statements.

NOTES TO THE FINANCIAL STATEMENTS

Note 1 Authority and Reporting Entity

The Alberta Gambling Research Institute (the "Institute") is an unincorporated organization. It is a research consortium comprised of the University of Alberta, the University of Calgary, and the University of Lethbridge (the "Partner Universities"). Relations between the Institute and the Government of Alberta are defined in an Agreement between the Institute, Partner Universities and the Alberta Government dated April 1, 2011 (signed September 27, 2011). The Institute is directed by a Board comprised of eight members including two appointees (senior administrators and researchers) from each of the three Partner Universities in addition to a representative who is appointed by the Ministry of Treasury Board and Finance and an external Board Chair who is appointed by the Vice-Presidents (Research) of the Partner Universities.

As required under the Agreement, the Institute reporting entity for the purpose of these financial statements is that portion of Institute operations funded by the Ministry of Treasury Board and Finance. The Partner Universities contribute certain services and supplies, including research and administrative personnel and services, to the consortium. The fair value of these contributions, and the cost of these services and supplies, is not reflected in these financial statements.

Note 2 Purpose

The purpose of the Institute is to:

- expand the breadth and depth of scientific knowledge into gambling;
- · promote or direct research in those priorities and areas identified as stakeholder priorities;
- develop research capacity in the Partner Universities;
- sponsor research that is peer reviewed and of the highest academic quality;
- · facilitate the transfer of knowledge and information to stakeholders;
- provide education about current knowledge through research publications, reporting of research results and knowledge translation strategies; and,
- identify and pursue other potential funding sources.

Note 3 Summary of Significant Accounting Policies and Reporting Practices

General – Public Sector Accounting Standards ("PSAS") and Use of Estimates

These financial statements have been prepared in accordance with Canadian PSAS. The measurement of certain assets and liabilities is contingent upon future events; therefore, the preparation of these financial statements requires the use of estimates, which may vary from actual results. The Institute has no assets or liabilities that require Institute administration to use judgment to determine value.

Revenue Recognition

All revenue is reported on the accrual basis of accounting. Cash received for which expenses have not been incurred by year end is recorded as deferred revenue.

Contributions from the Ministry of Treasury Board and Finance

The Partner Universities entered into a funding agreement with the Ministry of Treasury Board and Finance effective April 1, 2016 to provide the Institute with \$1,500,000 annually until March 31, 2021. The agreement calls for detailed reporting to the Ministry of Treasury Board and Finance at various dates throughout the year. Reporting is complete for fiscal year ended March 31, 2019.

Unspent funds are returned to the Institute by the grant recipient and recorded as other revenue.

Expenses

Grants are recorded as expenses when all the terms and conditions of eligibility have been met and the Institute has authorized payment of the grant.

Assets

Intellectual Property

Intellectual property rights with respect to all research conducted with the financial support, or under the auspices, of the Institute are governed by the policies of the Partner University with which the researcher is affiliated. These rights do not accrue directly to the Institute and are not recognized in these financial statements. The Government of Alberta and the Partner Universities are entitled to freely use and copy, other than for commercial purposes, any intellectual property so created.

Financial Instruments

Financial instruments consist of cash and cash equivalents, grants receivable, unexpended funds receivable and accounts payable and accrued liabilities. They are recognized at cost. Write-downs on financial assets are recognized when the amount of a loss is known with sufficient precision, and there is no reasonable expectation of recovery. The Institute does not own any derivatives, portfolio investments or financial instruments designated in the fair value category and as such has not included a statement of remeasurement gains and losses.

It is management's opinion that the Institute is not exposed to significant market, interest rate, currency, or credit risks arising from its financial instruments.

Change in Accounting Practices

Effective April 1, 2018, the Institute adopted the recommendations relating to the following Sections, as set out in the CPA Canada Public Sector Accounting Handbook:

PS 3430 Restructuring Transactions

Pursuant to the recommendations, the changes were applied prospectively, and prior periods have not been restated. There was no material impact on the combined financial statements of adopting the new Sections.

Note 4 Cash and cash equivalents

Under the Funding Agreement, funds are to be administered by the HUB University (University of Calgary) on behalf of the Institute. The Institute's funds are invested in keeping with the HUB University's policies for the investment of similar funds. Interest on the funds, when paid to the Institute, is at a rate that is referenced to the 90-day Treasury Bills Canada rate.

Note 5 Unexpended Funds Receivable/Recovered

Grants are provided to the Partner Universities for capacity building, research development, library collections, and research node administration for gambling-related operations. These particular grants have a provision that any unspent funds are to be returned to the Institute. The following table provides an accounting for the grants allocated and the amounts spent by the Partner Universities during this fiscal year. In the 2018/2019 fiscal year, one major grant from University of Alberta, upon completion, had unspent funds (\$947), which is included in the table below. This is not common and is expected as a one-time occurrence.

	2019			2018	
	University of Alberta	University of Calgary	University of Lethbridge	Total	Total
Unexpended grants, opening balance	\$ 7,356	\$-	\$ 7,938	\$ 15,294	\$ 12,832
Capacity building	50,380	100,000	89,000	239,380	292,000
Library and collections		X \	120,000	120,000	140,000
New grants provided	50,380	100,000	209,000	359,380	432,000
Current year expenditures	(36,993)	(100,000)	(204,810)	(341,803)	(416,707)
Recovered	(7,356)		(7,938)	(15,294)	(12,831)
	(44,349)	(100,000)	(212,748)	(357,097)	(429,539)
Unexpended grants, major grant	947			947	
Unexpended grants, closing balance	\$ 14,334	\$	\$4,190	\$ 18,524	\$ 15,294

Note 6 Commitments

The Institute receives its principal funding from the Ministry of Treasury Board and Finance.

The five year agreement was renewed effective April 1, 2016 and expires on March 31, 2021.

The Institute's ability to maintain viable operations is dependent upon the continued support from the Alberta Government.

Note 6 continued...

The Institute has the following commitments:

Fiscal Year	Research Grants ^(a)	Lease (b)	Sustainability positions(c)	Research direction ^(d)	Total
2019/2020	\$ 334,862	\$ 16,139	\$ 162,500		\$ 513,501
2020/2021	21,568	4,035	32,500		58,103
2021/2022					
Total	\$ 356,430	\$ 20,174	\$ 195,000		\$ 571,604

(a) Research Grants

The Institute has various types of granting programs. In response to calls for proposals, the Board approves researcher identified initiatives. Upon approval and receipt of various confirmation documents from the host Institute University's Research Services Office, the Institute authorizes payment of the first year funding of the approved award. For these types of awards extending beyond one year, authorization of subsequent period amounts is subject to satisfactory reporting. Commitments for these awards include the subsequent period amounts, and any other approved grant requests for which the researcher has not yet met all of the eligibility criteria.

(b) Lease

The Institute entered into a lease with the University of Calgary for the period July 1, 2015 to June 30, 2020 with a renewal option of five years.

(c) Sustainability Positions

The Board approved funding for a 'sustainability position' at each of the Partner Universities. The principal purpose of the positions is to encourage the expansion and development of gambling research. Funding in the amount of \$100,000 per year for 5 years, up to \$12,000 in relocation costs, and up to \$30,000 per year to support graduate student assistantships to support the position was offered to each of the Partner Universities. As at March 31, 2019, two appointments were in place and one expired in November 2018.

(d) Research Direction

The Board approved proceeding with the engagement of a faculty member at one of the Partner Universities for the contracting for services related to advising the Board on strategic research planning. On February 1, 2013, N. el-Guebaly Professional Corporation was contracted to perform this function. The contract for Dr. el-Guebaly was renewed on January 1, 2018 for six months and ended June 30, 2018.

Note 7 Economic Dependence

The Institute receives its principal funding from the Ministry of Treasury Board and Finance.

Note 8 Related Party Transactions

During the year, there were no related party transactions except for transactions with the Ministry of Treasury Board and Finance and Partner Universities as disclosed in the notes and schedules to these financial statements.

Note 9 Budget

The 2018-2019 budget was approved by the Institute's Board of Directors on December 6, 2017.

Note 10 Approval of Financial Statements

These financial statements were approved by the Institute's Board of Directors on July 26, 2019.

SCHEDULE OF EXPENSES

	2019 Budget	2019 Actual	2018 Actual	
Research				
Grant competition/strategic research	\$ 630,000	\$ 765,285	\$ 850,899	
Capacity building	526,667	541,820	652,000	
Governance, research direction	20,000	19,328	84,001	
	1,176,667	1,326,433	1,586,900	
Infrastructure and Library		// ///////////////////////////////////		
Library and collections	140,000	120,000) 140,000	
	140,000	120,000	140,000	
Research Linkages				
Events, colloquia	50,000	77,851	58,197	
Communications, exchanges	30,000	21,409	31,117	
	80,000	99,260	89,314	
Research Administration)////		
Governance	50,000	33,767	33,684	
Personnel costs	211,000	204,603	205,037	
Contract services	10,000///		438	
Professional fees	20,000	13,302	12,600	
Administrative hub	30,000	13,473	13,871	
	321,000	265,145	265,630	
Total Expenses	\$ 1,717,667	\$ 1,810,838	\$ 2,081,844	

BOARD OF DIRECTORS

el-Guebaly, Dr. Nady

Nady el-Guebaly is Professor and Head, Division of Addiction, in the Department of Psychiatry at the University of Calgary and past Chair of the Department. He is the Founding Past Medical Director of the Calgary Health Region's Addiction Program and Founding Past President of the International Society of Addiction Medicine. Currently, Dr. el-Guebaly is Chief Examiner of the International Society of Addiction Medicine; Editorin-Chief, Canadian Journal of Addiction; and Senior Editor, Textbook of Addiction Treatment: International Perspectives. Major research interests have resulted in hundreds of peer-reviewed papers and chapters and numerous past and current research grants. Dr. el-Guebaly joined the Institute as Research Director in 2013 and served in an ex-officio advisory capacity on the Institute Board until June 30, 2019.

Godley, Dr. Jenny

Jenny Godley is an Associate Professor in the Department of Sociology at the University of Calgary. Trained as a quantitative sociologist and a demographer, her major research areas are interdisciplinary research evaluation, social network analysis, gender, demography, and health. Dr. Godley has published both quantitative and qualitative articles in a variety of journals in sociology, public health, and evaluation science. She frequently works with interdisciplinary teams to conduct empirical examinations focusing on the social determinants of health using nationally representative data from Statistics Canada. Dr. Godley also has a strong interest in the ethics of human subjects research and was recently appointed Chair of the Conjoint Faculties Research Ethics Board at the University of Calgary. She is on the editorial board of the Canadian Journal of Public Health and an ad hoc reviewer for several other journals. Dr. Godley joined the Institute Board on May 1, 2018.

Kienc, Ms. Berenika

Berenika Kienc is the Manager, Strategy & Enterprise Planning at the Alberta Energy Regulator. Previously, she was a Senior Consultant with Deloitte Canada LLP and the Manager of Policy and Research for the Edmonton Chamber of Commerce. She holds an MBA

from the University of Alberta. Ms. Kienc joined the Institute Board as the External/Public Member on September 22, 2017.

Lund, Dr. Anna

Anna Lund is an Assistant Professor in the Faculty of Law at the University of Alberta. She researches in the areas of bankruptcy and insolvency, and debtor creditor law, and civil procedure. She is currently researching the role of public income support programs in preventing medical bankruptcy and the intersection of insolvency law, environmental law. Additionally, she has published articles in journals including the Canadian Business Law Journal, the Alberta Law Review, and the Annual Review of Insolvency Law. A member of the Law Society of Alberta, she continues to practice on a pro bono basis through the Edmonton Community Legal Centre and Pro Bono Law Alberta. Dr. Lund sits on the Canadian Bar Association's Access to Justice Committee (Alberta Branch). Dr. Lund joined the Institute Board on March 1, 2018.

Malacrida, Dr. Claudia

Claudia Malacrida is Associate Vice-President in the Office of the Vice President Research at the University of Lethbridge and a Professor of Sociology. Dr. Malacrida is the author of five books relating to disability, the body, and the history of institutionalization and eugenics in Alberta. Her current research is focused on disability and sexuality (newgenics to eugenics) and on motherhood and medicine (childbirth and choice). In each, she is concerned about how seemingly personal and embodied experiences are constrained and produced through public policy, social attitudes, and professional practice. Dr. Malacrida holds several major grants, including a SSHRC grant for the Newgenics to Eugenics project and an AIHS grant for the Childbirth and Choice project. Dr. Malacrida joined the Institute Board on January 1, 2016.

Nicol, Dr. Christopher

Chris Nicol is the University Librarian at the University of Lethbridge and a Professor of Economics. Prior to his appointment as University Librarian, Dr. Nicol was Dean of the Faculty of Arts and Science at the University of Lethbridge for twelve years. He has served as a member of the Editorial Board of the Canadian Journal of Economics, and a member of the Executive Council of the Canadian Economics Association. His interests are in econometrics, applied econometrics, the theory of consumer behaviour, and macroeconomic policy debates. Dr. Nicol joined the Institute Board on January 1, 2018.

O'Shea, Dr. Séamus

Séamus O'Shea is a former Vice President (Academic) and Provost, and Professor of Chemistry at the University of Lethbridge. In addition to duties at the University, he is an advocate for increasing university participation and a promoter of university transfer programs, post-diploma degrees, and student-focused programming. He participated in planning and implementing advanced infrastructure for research and development, particularly high performance networks and computing systems. Dr. O'Shea's research interests involved mathematical and computer modelling of molecular liquids and solids. He is past Chair, Board of Directors, of iCORE (informatics Circle of Research Excellence), of Cybera (networks), and of WestGrid (high performance computing systems). Dr. O'Shea was appointed Chair of the Institute's Board of Directors on February 1, 2012, and reappointed in January 2016 for a three-year term.

Strong, Dr. Tom

Tom Strong is a Professor, psychologist, and counsellor-educator at the University of Calgary who researches and writes on the collaborative, critically-informed, and practical potentials of discursive approaches to psychotherapy. Having recently completed a term as the Werklund School of Education's Associate Dean Research, Dr. Strong is interested in the use of mixed qualitative methods to examine helping processes, including natural recovery processes from addiction. Dr. Strong joined the Board on September 1, 2014.

Wild, Dr. Cameron

Cam Wild is a research psychologist specializing in addiction studies. Dr. Wild was the inaugural Associate Dean (Research) in the School of Public Health at the University of Alberta, where he is currently a Professor and Director of the Addiction and Mental Health Research Laboratory. Dr. Wild's research interests include: epidemiology of substance misuse and addictive behaviours, injection drug use, comorbid addictions and mental disorders, randomized trials and quasi-experiments of community-based brief interventions, motivational factors influencing client retention in addiction treatment, compulsory treatment policies and outcomes, and organization of service systems in relation to population severity and need. Dr. Wild joined the Institute Board on September 1, 2014.

Wong, Ms. Glenda

Glenda Wong assumed the position of Executive Director of the Alberta Gambling Research Institute on September 1, 2015. Ms. Wong's work background includes twelve years of senior management and administration in the area of health care education within the University of Calgary. She has also collaborated and worked with other Canadian universities, provincial and national government health departments, and various health organizations. Ms. Wong serves in an ex-officio advisory capacity on the Institute Board and represents the Institute on a number of inter-organizational and inter-jurisdictional planning bodies for collaborative research initiatives.

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