34th Annual Psychiatry Research Day

Friday, Nov. 1, 2024 9 a.m. to 4 p.m.

Guild Hall and Commons Atlantica Hotel Halifax 1980 Robie Street Halifax, NS





RESEARCH DAY 2024 SCHEDULE*

8:30 a.m. Registration

9:00 a.m. Welcome

Dr. Vincent Agyapong

Head, Department of Psychiatry

Dalhousie University and Nova Scotia Health Central Zone

Opening remarks

Dr. David Anderson

Dean, Faculty of Medicine, Dalhousie University

Dr. Phil Tibbo

Director of Research, Department of Psychiatry, Dalhousie University

Morning Session

Moderated by Dr. Kim Good, Director of Research, Section of Forensic Psychiatry, Dalhousie University

9:15 a.m. Keynote: Advances in personalized and precision mental health care

Dr. Jaime Delgadillo

Professor of Clinical Psychology, University of Sheffield, United Kingdom

10:15 a.m. Coffee break and poster viewing

11 a.m. **Sean McWhinney**

Post-Doctoral Fellow/Research Fellow, Department of Psychiatry Central obesity as a predictor of altered brain structure and cognitive

impairment in first episode psychosis

11:15 a.m. **Jibran Hagalwadi**

Undergraduate Student, Department of Psychology and Neuroscience An App Responding to Behaviour of People to Promote Mental Wellbeing

in Anxious Youth

11:30 a.m. Christian Guinard

Graduate Student, Faculty of Computer Science

Examining mnemonic discrimination performance in a hippocampus

model using the mnemonic similarity task

11:45 a.m. Nitya Adepalli

Psychiatry Research Staff

Association of accelerated brain aging with developmental

psychopathology in youth at familial risk for severe mental illness

12 p.m. Katie Scott

Graduate Student, Department of Psychiatry

Exploring phenotypes of bipolar disorder in families using principal

component analysis

^{*} Each presentation is 10 minutes with 5 minutes for discussion and questions, with the exception of the 75th Anniversary presentation which is 20 minutes with 10 minutes for discussion and questions.

12:15 p.m. Lunch

12:45 p.m. Poster viewing and lunch

Afternoon Session

Moderated by Dr. Jill Chorney, Director of Research, Division of Child and

Adolescent Psychiatry, Dalhousie University

1:30 p.m. **Dr. Phil Tibbo**

Department of Psychiatry 75th Anniversary Presentation — Research

2 p.m. Mikaela Ethier-Gagnon

Graduate Student, Department of Psychiatry

Trauma and cannabis cue-induced reward circuit alterations in cannabis

users with trauma histories

2:15 p.m. Bala Harri

Graduate Student, Department of Psychiatry

Workplace Mental Health Promotion Intervention for African Healthcare

Workers: A Scoping Review

2:30 p.m. **Dr. Kara Dempster**

Physician Faculty, Department of Psychiatry

The Association of Anterior Cingulate Cortex Glutamate and Clozapine

Eligibility in an Early Psychosis Sample

2:45 p.m. Coffee break and poster viewing

3 p.m. Lorielle Dietze

Graduate Student, Department of Medical Neuroscience

White Matter Diffusivity Measures are Differentially Sensitive to Clinical

Factors: ENIGMA Bipolar Disorders Study in 2166 Individuals

3:15 p.m. **Dr. Kim Good**

Non-Physician Faculty, Department of Psychiatry

Olfactory subnetwork abnormalities in patients with early phase

psychosis: a resting state functional connectivity study

3:30 p.m. **Dawson Sutherland**

Psychiatry Research Staff

Screen Time, Motives for Screen Use, and Adolescent Mental Health:

A Cross-Sectional Mobile Sensing Study

3:45 p.m. Awards and Closing Remarks

KEYNOTE SPEAKER

Dr. Jaime Delgadillo

Professor of Clinical Psychology University of Sheffield, United Kingdom

Keynote: Advances in personalized and precision mental health care

Several psychological and pharmacological interventions are available for the treatment of common mental health problems. Despite this, less than half of patients have an optimal response to their initial intervention and the care pathway for many is characterized by a prolonged trial-and-error process to search for the right treatment option. Both clinical judgment and practice guidelines are insufficient to remedy this problem, which can be attributed in part to a lack of precision in diagnosis and treatment selection. "Precision mental health care" is an emerging field that aims to offer patients the right treatment, in the right dose, by the right clinician, at the right time. Such an approach involves the development of artificial intelligence (AI) technologies to support clinical decisions. This lecture will cover examples of innovations in the use of AI to guide diagnosis, treatment selection, outcome monitoring and treatment adaptation.

About the Speaker

Jaime Delgadillo PhD is a Professor of Clinical Psychology at the University of Sheffield, United Kingdom. He has postgraduate qualifications in psychoanalysis and cognitive behavioural therapy, and 20 years of clinical experience as a psychotherapist. His research focuses on understanding individual differences in psychological treatment response. He is particularly interested in the personalization of treatment applying methods from the field of precision medicine. He has over 100 publications in scientific journals and book chapters. He is an associate editor of the journal Psychotherapy Research and a member of the expert advisory group for the National Health Service (NHS) Talking Therapies system (formerly known as IAPT). His current research examines the effectiveness and acceptability of new technologies such as digitally-enabled therapy, machine learning prediction models and artificial intelligence (AI) tools to support clinical decision-making.

https://www.sheffield.ac.uk/psychology/people/academic/jaime-delgadillo

ORAL PRESENTATIONS

Presenters' names are in bold.

Graduate Student

Dietze, L., McWhinney, S., Favre, P., Andreassen, O., Ching, C., Thompson, P., Houenou, J., Hajek, T.

Department of Medical Neuroscience

White Matter Diffusivity Measures are Differentially Sensitive to Clinical Factors: ENIGMA Bipolar Disorders Study in 2166 Individuals

Ethier-Gagnon, M., Barret, S.P., Romero-Sanchiz, P., Helmick, C., McAllindon, D., Tibbo, P., Crocker, C., Good, K., Arenella, P., Rudnick, A., Cosman, T., Trottier, S.-J., DeGrace, S., Collins, P., Girgulis, J., Snooks, T., & Stewart, S. H.

Department of Psychiatry

Trauma and cannabis cue-induced reward circuit alterations in cannabis users with trauma histories

Guinard, C., Trappenberg, T., and Nunes, A.

Faculty of Computer Science

Examining mnemonic discrimination performance in a hippocampus model using the mnemonic similarity task

Harri, BI, JY Kung, Ojo, T.M.F. Okonkwo A, Yakubu A,

Eboreime, E

Department of Psychiatry

Workplace Mental Health Promotion Intervention for African Healthcare Workers: A Scoping Review

Scott, K., Nunes, A., & Alda, M.

Department of Psychiatry

Exploring phenotypes of bipolar disorder in families using principal component analysis

Non-Physician Faculty

Good, K., Walsh, E., Tibbo, P., Dempster, K., Morrison, J., Ursuliak, Z., Alexiadis, M., Crocker, C.

Department of Psychiatry

Olfactory subnetwork abnormalities in patients with early phase psychosis: a resting state functional connectivity study

Physician Faculty

Dempster, K. Toba Oluboka, T. Crocker, C. Tibbo, P. Department of Psychiatry The Association of Anterior Cingulate Cortex Glutamate and Clozapine Eligibility in an Early Psychosis Sample

Post-Doctoral Fellow/Research Fellow

McWhinney, S.R., Kolenic, M., Selitser, M., Katja, F., Vochoskova, K., Spaniel, F., Hajek, T.

Department of Psychiatry

Central obesity as a predictor of altered brain structure and cognitive impairment in first episode psychosis

Psychiatry Research Staff

Adepalli, N., Murage, D., Dumpala, SH, Nazarova, A., & Uher, R. Department of Psychiatry Association of accelerated brain aging with developmental psychopathology in youth at familial risk for severe mental illness

Sutherland, D., Duke, A.E.E, Cormier, M., Murray, N.E., Li, S., Hossne, J. S., Marin-Dragu, S., Muzamil, M., Bagnell, A., Sherry, S.B., Orji, R., Stewart, S.H., Meier, S.M. Department of Psychiatry Screen Time, Motives for Screen Use, and Adolescent Mental Health: A Cross-Sectional Mobile Sensing Study

Undergraduate Student

Hagalwadi, J., Sutherland, D., Dolek S., Marin-Dragu, S., Bagnell, A., Wozney, L., McGrath, P., Orji, R., Meier, S. Department of Psychology and Neuroscience An App Responding to Behaviour of People to Promote Mental Wellbeing in Anxious Youth

POSTER PRESENTATIONS

Presenters' names are in bold.

Graduate Student

Adu, M., Dias, R., Ezeanozie, N., Sridharan, S., Morrison, J., MacKinnon, M., Wozney, L., Eboreime, E., and Agyapong, V.I.O. Department of Psychiatry

Expanding Patient Access to Psychiatry: Evaluating the Early Impacts and User Satisfaction of the Rapid Access and Stabilization Program (RASP) in Nova Scotia

Bossom, I. R. L., Hagen, A. E. F., Murray, T., DiBonaventura, F., Harrington, Z., & Stewart, S. H.

Department of Psychology and Neuroscience

Anhedonia and Depressive Symptoms are Related to Two Distinct Risky Drinking Motives Among Individuals with Clinical Depression

Carbyn, H., Hossain, A., MacDonald, B., Lingley-Pottie, P., Palmer, L.D., Shugar, A., McDonald-McGinn, D.M., McGrath, P.J., Bassett, A.S., Cytrynbaum, C., Swillen, A., & Meier, S. Department of Psychiatry

Evaluating the Relationship Between Caregiver Mental Health, Social Support, and Child Behavioural Issues in Families Affected By 22q11.2 Deletion Syndrome.

Drake, R.S., Maxwell, A.E., Lamb, T.L., Whitehorn, D., Wilson, K.R. & Eskes, G.A.

Department of Psychology and Neuroscience

Mindful practice: Searching for synergy between mindfulness and cognitive training

Fraiha-Pegado, J., McWhinney, S. R., Ching, C. K., Andreassen, O., Thompson, P. M., Hajek, T.

Department of Psychiatry

Impact of Weight Gain on Hippocampal Volume Over Time in Individuals With Bipolar Disorders and Healthy Controls

Francis, M. A., Hackett, K., Olmstead, L., McKearney, K., Jaworska, N., Tibbo, P., Fisher, D.,

Department of Psychiatry

Examining the impact of auditory hallucinations on the neural functioning of individuals with bipolar disorder.

Gazit, T., McGrath, P.J.

Department of Psychiatry

Telehealth-delivered Written Exposure Therapy by Paraprofessional Coaches for Teenagers with Post-Traumatic Stress Disorder: A Randomized Controlled Trial

Inness, B., Boruah, A., Mason, L., Khoury, J., Stewart, S. H., & Meier, S. Department of Psychiatry
Longitudinal Effects of Parental Smartphone Usage on Child
Socioemotional Wellbeing Proposal

Iyer, R. S., MacDonald, B., Sutherland, D., Muzamil, M., Banire, B., Orji, R., & Meier, S.

Faculty of Computer Science

Predicting Youth Mood and Energy Levels based on Typing Metrics from Instant Messaging (IM) platforms: A Machine Learning Approach

Jackson, S., Reid, RER., Uher, R., & Pavlova, B.

Department of Psychiatry

Using Actigraphy and Speech Analysis to Measure Physical Activity and Perseverative Thinking in People with Mood Disorders

Kasheke, G. D. S., Holman, S. P., Fraser, K., Asainayagam, A. G. C., Vuligonda, V., Sanders, M. E., Makarov, A. I., Robertson, G. S. Department of Pharmacology *IRX4204 Enhances Gait Recovery in Mice Subjected to Experimental Autoimmune Encephalomyelitis*

Obeng Nkrumah, S., Adu, M.K.,& Agyapong, B.

Department of Psychiatry

Prevalence and correlates of Depression, Anxiety, and burnout among physicians: A Scoping Review

Obeng Nkrumah, S., Shalaby, R., Diaz, R.D.L., Agyapong, B.,

Greenshaw, A.J.,& Agyapong, V.I.O.

Department of Psychiatry

Psychological health and wellness among medical doctors in Canada and the impact of the Wellness4MDs supportive text messaging program: Study Protocol **Obuobi-Donkor G.**, Eboreime E., Dias RdL., & Agyapong VIO. Department of Psychiatry
User Satisfaction With a Daily Supportive Text Message Program (Text4PTSI) for Public Safety Personnel: Longitudinal Cross-Sectional Study

Obuobi-Donkor G., Dias RdL., Eboreime E., Wozney L., & Agyapong VIO.

Department of Psychiatry

Evaluating the Three-Month Post-Intervention Impact of Supportive Text Message Program on Mental Health Outcomes during the 2023 Wildfires in Alberta and Nova Scotia, Canada

Oulton, M., Kasheke, G., Fraser, K., Robertson, G. Department of Pharmacology

Evaluating the Efficacy of Ibogaine in Alleviating Somatosensory Deficits Post-Stroke in a Mouse Model: A Preliminary Study

Ponto ND, Coady L, Tibbo PG, Crocker CE

Department of Medical Neuroscience

Sex Differences in Symptomatic and Functional Outcomes in Atypical Antipsychotic Use in Individuals with Early Phase Psychosis: A Systematic Review

Keshen, A.R., **Price, C.**, Hilbert, A., Taylor, V., Harris, A.L., Trappenberg, N., Sadek, J., Frank, G.K.W., and Murray, S.B. Department of Psychiatry

Effects of Stimulant Medication on Loss of Control Eating in Youth with Attention-Deficit/Hyperactivity Disorder: A Protocol

Slaunwhite-Hay, S., Francis, A., Bissonnette, J., MacNeil, S., Crocker, C., Stewart, S., Tibbo, P., Fisher D.

Department of Psychiatry

The Effects of Cannabis Use on Event-Related Potentials in Males and Females

Sodunke, T.

Faculty of Health

Improving accessibility to Mental Health & Substance Use (MHSU) services for Black immigrant youths of African Descent

Non-Physician Faculty

Emberly, D., Duguay, J., Hatch, J., MacLean, T. Department of Psychology and Neuroscience Community Engagement: Addressing inequity in access to psychological care with historically marginalized communities

Meier, S., Marin-Dragu, S., McArthur, J.L., Cormier, M., Kelso, A., Dolek, S., Blais, J., Chorney, J., Rosen, N.O., & Stewart, SH. Department of Psychiatry

Sexting for the Right Reasons - A Longitudinal Mediation Study

Physician Faculty

Armstrong, M., Regal, O., Bosma, M., Eskes, G., Murphy, C. Department of Psychiatry *Referral criteria of geriatric psychiatry services across Canada*

Kinley, J., Reyno, S.
Department of Psychiatry
Increasing virtual access and capacity to effectively treat Complex
Trauma across Nova Scotia

Rudnick, A., MD, PhD; Nolan, D., MSc Department of Psychiatry, Department of Bioethics, School of Occupational Therapy Predictors of Mental Health Care Outcomes for Nova Scotians Experiencing Operational Stress Injuries

Rudnick, A., MD, PhD; Higgins, K., PhD; Nolan, D., MSc; Shaheen, A., MSW
Department of Psychiatry, Department of Bioethics, School of Occupational Therapy
Current Research on Matching Trauma-Focused Therapies (TFTs) to Veterans: A Scoping Review

Post-Doctoral Fellow/Research Fellow

Bilikis, B., Marcus, C., Penny, C. & Sandra M. Department of Psychiatry / Faculty of Computer Science Comparative Analysis of Sleep Assessment Methods: Mobile Sensing Data, Actigraphy, and Sleep Diaries Fiagbe D., Fraunberger E.,, **Paramlall M.**Department of Psychiatry
Transcranial Electrical Stimulation for Cognitive and Mood Outcomes in mTBI: A Scoping Review

Psychiatry Administration

Esliger, M., Rudnick, A. Department of Psychiatry Mentorship for Clinical Academic Psychiatrists: A Qualitative Study of a Pilot Program

Psychiatry Research Staff

Church, R., Crocker, C., Pencer, A., Garland, E., Cookey, J., & Tibbo, P. Psychiatry Research — Nova Scotia Early Psychosis Program *Piloting of an intervention to reduce problematic alcohol use in Early Phase Psychosis patients*

Connolly, O., Esliger, M., Good, K., Hazelton, L., MacLeod, T., Manning, A., & Murphy, C.
Department of Psychiatry, Research Assistant
Improving detection of bias at psychiatry grand rounds using audience feedback

Daneff, M.; Campbell, L.A.; Chorney, J.; Clark, S.E.; Bagnell, A. Department of Community Health and Epidemiology Our virtual reality: Supporting shared decision-making for virtual care in child and adolescent mental health services

Nosko, J., Hambly Lapointe, C., Crocker, C., & Tibbo, P. Department of Psychiatry Adolescent and young adult cannabis use and its effect on brain structure, function, and metabolite concentrations: a scoping review

Parsa, M., Murray, N., Meier, S. Department of Psychiatry A Potential Application of AI for Assessing Behavioural and Functional Patterns of Anxiety Corkum, E., Dietze, L., McWhinney, S.R., Ching, C.K., Andreassen, O., Thompson, P.M., Hajek, T. for the ENIGMA BMIx and Bipolar working groups

Presenter is Linzhi Wu

Department of Psychiatry

Body mass index as a risk factor for brain gray matter and white matter changes and cognitive alterations in bipolar disorders

Psychiatry Resident

Bond, T., Yeung, K., Manning, A. Department of Psychiatry The Perception of Wellness Amongst Psychiatry Residents a Qualitative Study

Burns, EE., Singh, K., Murphy, C., Krieger-Frost, S. Department of Psychiatry *PGY3 Dementia Simulation Experience*

Campbell, N., Watts, A., Manning, A., Gossen, S., & Lines, K. Department of Psychiatry
Simulation-Based Training for Junior Psychiatry Residents on Managing Agitation in Psychiatric Emergencies

Church, S., Stinson, N., Dikaios, K., & Uher, R.

Department of Psychiatry

Combination versus Augmentation for the treatment of Major Depressive Disorder: Clinical Experience from the OPTIMUM-D Research Study

Cunningham, J.E.A., Uher, R. & Nunes, A.

Department of Psychiatry

Sleep-Related Predictors of Relapse in Major Depressive Disorder: Interim Results of a CAN-BIND Wellness Monitoring Study Report

Fraunberger E, Hinde A, Reid H, Paramlall M Department of Psychiatry Impact of Psychiatric Comorbidities on Epilepsy Outcomes: A Systematic Review **Hinde, A.**, Hrabok, M., Song, W-Y.,
Department of Psychiatry
Repetitive Transcranial Magnetic Stimulation Shows Efficacy in

Repetitive Transcranial Magnetic Stimulation Shows Efficacy in Improving Negative Symptoms in Early Psychosis: A Systematic Review

Undergraduate Student

Fraser, K., Price, C., Keshen, A. Undergraduate medical education at Dal Best Practices for Treating Eating Disorders in Weight Loss Surgery Patients: A Literature Review

Georgoudis S, Fraunberger E, Paramlall M

Department of Psychiatry

Blood Biomarkers for the Prediction of Adverse Cognitive and Psychiatric Outcomes after mTBI: A Scoping Review

Hackett, K., Francis, A., Anderson, T-Jay, Ross, L., Bissonnette, J., Napier, K., Shead, W., Fisher, D. Department of Psychology and Neuroscience Reduced neurophysiological response to auditory novelty stimuli with higher schizotypal trait scores

Dempster, K., Crocker, C., & Hodgson-Pageau, E.

Dalhousie Neuroscience

A Pilot Study to Compare the Effectiveness of Long Acting Injectable Paliperidone Palmitate Versus Aripiprazole Monohydrate in First Episode Psychosis

Lopez, N., Smith, J., Carnegy, L., Morrison, J., Abidi, S. Child and Adolescent Psychiatry

Examining the qualitative experiences of youth and families in the transition from child to adult mental health services in the Nova Scotia Early Psychosis Program

MacLean, T., Emberly, D.

Department of Psychology and Neuroscience

An Evaluation of the Student Experience at Dalhousie's Centre for Psychological Health: Training Strengths and Areas for Improvement

Olmstead, L. P., Gilbert, V., Anderson, T-J., Francis, A. M., Ross, L., Bissonnette, J. N., Napier, K. R., Shead, N. W., Fisher, D. J. Department of Psychology and Neuroscience Interaction of caffeine and human menstrual cycle phase on EEG-derived markers of visual search

Schenkels, M., Keshen, A., Price, C. Medical Student — Eating Disorder Clinic CBT-T Outcomes in the Nova Scotia Provincial Eating Disorder Service: A Retrospective Chart Review

Whyte, K., Emberly, D.J., & Johnson, S.
Department of Psychology and Neuroscience
Uses of broad consent among diverse populations: A scoping review

Youssef, J., Propper, L., Shea, S., Smith, I.M., MacWilliam, S., MacLeod, K., Foxall, V., Thomas, M.

Pediatrics

The "CALM" Study: A Randomized Placebo-Controlled Trial of Sertraline vs. Placebo in the Treatment of Anxiety in Children and Adolescents with Neurodevelopmental Disorders

LEARNING OBJECTIVES

Research Day Learning Objectives:

At the conclusion of this activity, participants will be able to:

- Describe how digital health and AI technologies support mental health service delivery
- 2. Identify current mental health research studies in progress or completed in the Department of Psychiatry

Keynote Presentation Learning Objectives

Keynote Presentation: Advances in personalized and precision mental health care

Dr. Jaime Delgadillo

At the conclusion of this activity, participants will be able to:

- 1. Describe key concepts and theory related to precision medicine
- 2. Recognize basic concepts of machine learning and its relation to artificial intelligence (AI)
- 3. Identify examples of treatment personalization using AI technologies

75th Anniversary Presentation Learning Objectives

Presentation: **Department of Psychiatry 75th Anniversary Presentation** — **Research**

Dr. Phil Tibbo

At the conclusion of this activity, participants will be able to:

- 1. Value the history of research productivity and excellence in the Department of Psychiatry, Dalhousie University
- 2. Acknowledge how the history of research informs future research directions and strategic plans
- 3. Recognize significant milestones in the Department of Psychiatry's research history

CONTINUING PROFESSIONAL DEVELOPMENT

Certification/Accreditation

Educationally approved by Dalhousie University Continuing Professional Development and Medical Education



CONTINUING PROFESSIONAL DEVELOPMENT & MEDICAL EDUCATION

This event is an Accredited Group Learning Activity (Section 1) as defined by the Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada, and approved by Dalhousie University Continuing Professional Development and Medical Education. You may claim a maximum of **4.25** hours (credits are automatically calculated).

Through an agreement between the Royal College of Physicians and Surgeons of Canada and the American Medical Association, physicians may convert Royal College MOC credits to AMA PRA Category 1 Credits™. Information on the process to convert Royal College MOC credit to AMA credit can be found at:

https://edhub.ama-assn.org/pages/applications.

In keeping with CMA Guidelines, program content and selection of speakers are the responsibility of the planning committee. Support is directed toward the costs of the course and not to individual speakers through an unrestricted educational grant.

EVALUATION

This year's evaluation survey can be found electronically at:



OR

https://dalpsychiatry.ca/ls/index.php/482411?lang=en

IMPORTANT: Please note the evaluation survey will close on **Sunday, Nov. 24, 2024** at **11:59 p.m.**

RESEARCH DAY PLANNING COMMITTEE

Dr. Phil Tibbo (Chair) Director of Research; Professor Department of Psychiatry, Dalhousie University

Dr. Kim Good

Neuroscientist; Professor Section Research Director, Forensic Psychiatry Department of Psychiatry, Dalhousie University

Dr. Ejemai Eboreime

Assistant Professor Department of Psychiatry, Dalhousie University

Mandy Esliger

Evaluation and Curriculum Specialist Department of Psychiatry, Dalhousie University

Anila Balakrishnan

Research Coordinator Department of Psychiatry, Dalhousie University

RESEARCH MANAGEMENT TEAM

Dr. Phil Tibbo

Department Director of Research

Dr. Jill Chorney

Director of Research, Division of Child and Adolescent Psychiatry

Dr. Candice Crocker

Director of Research, Section of Acute, Consultation, and Emergency Psychiatry

Dr. Gail Eskes

Director of Research, Section of Geriatric Psychiatry

Dr. David Gardner

Director of Research, Section of Community Psychiatry

Dr. Kim Good

Director of Research, Section of Forensic Psychiatry





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