

Workshops: Career & Professional Development



The Real Value of
Giving & Receiving
Feedback
N. Huynh PhD
Concordia University



Skills for
Assertiveness &
Effective
Communication
F. Gutierrez-Meyers
McGill University



Skills for
Assertiveness &
Effective
Communication
D. Simpson
McGill University



PhD Careers in
Science
R. Maymon PhD
McGill University



Ethics in Academic
Publishing
A. Colosimo
McGill University

5th ANNUAL SUMMER SCHOOL May 12 - 13, 2025

24 Trainee Research Talks

T. Rutherford	Synthesis and characterization of DNA tetrahedra containing O ⁶ -alkylene 2'-deoxyguanosine cross-links for controlled disassembly by a DNA repair protein
Z. Lyu	Chemical synthesis of long, modified RNAs involved in gene editing and protein synthesis
A. Clairoux	Development of a capture-based method for separation of riboswitch conformations
S. Yao	Enhancing nuclease resistance through small molecule-nucleic acid supramolecular assembly
H. Dewling	Fluorescence-based assays to characterize viral polymerases & their inhibition: From single molecule to bulk
A. Mathai	Antisense oligonucleotide-assisted rolling circle amplification improves clinical sensitivity of assays for large, structured RNA targets
S. Abdulmawjood	A dipping lateral flow aptasensor for early detection of buddy off-flavor in maple sap
O. Li	A synthetic colloidal aggregates-embedded hydrogel delivery system for sustained antifibrotic therapeutic release
S. Roumans	Towards highly sensitive aptamers for the detection of syphilis
H. Kaur	Enhancing AS1411 aptamer stability: structural insights from 2'-fluoro-arabino nucleotide modifications
S. Tikoo	Synthesis of oligonucleotide conjugates containing selenium modified linkers
J. O' Grady	Chemical synthesis, characterization and biological evaluation of a chimeric HER2-binding aptamer
S. Faiad	Chemically modified dendritic conjugates for enhanced therapeutic activity

L. Xu	Organelle-targeted lipophilic fluorogenic antioxidants for live-cell imaging of ferroptosis
E. Guo	Co-delivery of thermostabilized enzyme and human neural progenitor cells in tailored hydrogels enhances recovery after stroke
J. Ma	Improving aptamer binding affinity through structured selection strategies and rational multimer design
V. Zhang	Reversibly clicked mRNA: a modular approach to enhance functionality
H. Wong	Computational methods to discover RNA-binding small-molecule inhibitors
J. Bennett	Elucidating the structure to harness the function of DNA/small molecule hybrid materials
M. Thijs	New synthetic methodology enables rapid screening and discovery of hydrazone-based fluorescent nucleobase analogues
S. Dao-Tse	Synthesis and evaluation of C5-modified arabinonucleic acids
T. Satkunarajah	Medicinal chemistry efforts towards novel TPP riboswitch binders
A. Arora	Chemical synthesis & biological evaluation of RNA mimics with preserved 2'-OH groups
L. Yamout	Biophysical characterization of G-quadruplexes using a fluorescence-based polymerase read-through assay

