## POLARIS ADJUDICATION ACTIVITY

#### WHO YOU ARE:

You are a part of a multi-department Sciences hiring committee. You have been selected to be on the hiring committee for a Tier 2 Fancy Research Chair. The hire must be within 15 years of their terminal degree. They are able to take up a position in any Faculty at Your University that derives the majority of funding from Sciences or Health agencies and organizations. You are presented with a précis of 2 candidates, who are both Canadian citizens.

- 1. Carefully read through the job ad (hiring criteria embedded in job ad: excellence in research, ability to get tri-council funding, pedagogical and teaching innovation, and stellar citizenship) and the two CVs on your own.
- 2. Rank the two candidates as first and second and provide specific evidence for your reasoning. Bullet points are preferred.

In a real scenario, you would have more information. But for this exercise you are asked to make a choice with the information you are given (and any information you may hold). Your next steps:

# Who do you choose and very importantly, why?

Your University seeks to hire a Full Time Tenure Stream - Assistant or Associate Professor in any Health, Sciences, and Engineering disciplines. The position will be enhanced by a federal Tier 2 Fancy Research Chair. The candidate will be expected to concentrate most of their time on their research program, the innovative training of highly qualified personnel (undergraduate, graduate and postdoctoral) and supporting institutional research intensification. This is a part of Your University's commitment to support our excellence in the STEMM fields. As per the San Francisco Declaration on Research Assessment (DORA), applicants who demonstrate a diverse array of research outputs that show impact on their discipline their field, the related industry/innovation sector, and society at large are encouraged to apply.

The successful candidate will be innovating trail-blazing methodologies in their discipline. Alongside building an internationally recognized program of research, they will build on past citizenship to support the building of research training infrastructure for faculty and trainees both inside and outside their lab. The individual will be expected to integrate with established interdisciplinary research clusters at Your University, called Organized Research Units (https://www.Youru.ca/research/organized-research-units/). The incumbent will receive enhanced research support, a reduced teaching load, and competitive access to dedicated research funds for the entire 5 years of the term. The incumbent will be eligible to receive one 5-year renewal, dependent on a program of research that shows impact, the securing of funds from one of Canada's federal funding councils and evidence of helping to build Your's research intensification infrastructure. Candidates must be appointable to one of the departments at Your University that has a concentration of researchers from Sciences, Health, or Engineering.

The incumbent should have an outstanding early career record including training and research awards and evidence of research excellence. The incumbent should have won or have the potential to win Tri-council operating grants.

# **CURRICULUM VITAE**

# PERSONAL INFORMATION

#### Raida Abbas, Ph.D.

Department of Biology and Health Science, Faculty of Health University of Lethbridge Canadian Citizen

## **EDUCATION**

2012/9 - 2017/5	Doctor of Philosophy (Ph. D.), Quantitative & Systems Biology, University of Southern California, San Marcos, CA-USA
2010/09 - 2012/8	Masters of Science (M. Sc.), Biochemistry, American University of Cairo, Egypt
2006/09 - 2010/04	Bachelor of Science (B. Sc.), Biomedical Sciences, Alexandria University, Egypt

# HONOURS AND SPECIAL RECOGNITIONS

2018/9	Faculty of Health Dean's Early Career Research Award
2017/9	CIHR - Banting and Best Early Career Award (\$16,667)
2018/12	Inflammation Society Stars Career Development Award (\$375,000)
2018/6	Vanier Research Foundation Discovery Award (\$25,000)
2016/5	Canadian Cancer Society Doctoral Prize (\$12,500)
2015/1	Inflammation National Research Foundation Travel Award (\$1,200)
2014/12	Winner of the 2014 Doctoral Bohringer-Ingleheim "Discovery Fast Track Challenge"
2014/10	Junior Investigator Grant Panel Travel Award from the Canadian Inflammation Society (\$5000)
2014/06	Canadian Arthritis Society Travel Grant (\$1,500)
2014/03	Canadian Society for Immunology Doctoral Travel Award (\$1000)

## **EMPLOYMENT HISTORY**

Assistant Professor	2017/7 - current
University of Lethbridge, Lethbridge, Alberta – Department of Biology and Health Sci	ence
<i>Doctoral Research Fellow</i> McGill University, Montreal, QC, Canada – Department of Immunology	2012-2017

#### Active [n=6]

2019/4 – 2024/4 Understanding the role of TNFR in Autoimmune Disease **Funding Sources:** Canadian Institutes of Health Research (CIHR) – Project Grant Principal Applicant, Total Funding - \$1,097,250

2019/4 – 2020/4 Understanding the role of TNFR in Autoimmune Disease **Funding Sources:** CIHR - Banting and Best Early Career Award in Infection and Immunity Principal Applicant, Total Funding - \$16,667

2019/1 – 2022/1 A marmoset model to design therapies targeting TNFR in Cancer **Funding Sources:** Cancer Foundation – Stars Career Development Award Principal Applicant, Total Funding - \$375,000

2018/6 - 2023/6 A Microbiology Laboratory to Elucidate the Mechanisms of Immune System Functioning after activity **Funding Sources:** Canada Foundation for Innovation (CFI) – JELF Principal Applicant, Total Funding - \$373,670

2017/6 - 2022/6 The Effects of Active Living on the Molecular Mechanisms of Autoimmunity **Funding Sources:** Natural Sciences and Engineering Research Council of Canada (NSERC) – Discovery Grant Principal Applicant, Total Funding - \$130,000

2017/7 – 2046/7 Startup Funds **Funding Sources:** University of Lethbridge Total Funding - \$250,000

#### Completed [n=4]

2018/7 - 2019/6 Dissecting the role of TNFR in regulating inflammatory and autoimmune diseases **Funding Sources:** Vanier Foundation – Discovery Award Principal Applicant, Total Funding - \$25,000

2018/4 - 2019/7 *Exploring the effects of nickel-infused tissue on inflammation*  **Funding Sources:** Natural Sciences and Engineering Research Council of Canada NSERC – ENGAGE Principal Applicant, Total Funding - \$25,000

2018/4 - 2019/7 *Exploring the effects of nickel-infused tissue on inflammation* **Funding Sources:** Ontario Center of Excellence (OCE) – VIP Principal Applicant, Total Funding - \$25,000

2017/1 - 2019/1 The Effects of Exercise on the Molecular Mechanisms of Auto-Immune Disease **Funding Sources:** University of Lethbridge– Junior Faculty Funds Principal Applicant, Total Funding - \$5,000 **Peer-Reviewed Publications** (# indicates role as corresponding senior author i.e. principal investigator of the study; \* indicates University students/trainees; ¶ indicates Co-first authors)

#### Journal Articles (published in the last 5 years)

- 1. David Johnson<sup>1</sup>, <u>Ali Mahalzi<sup>\*1</sup></u>, Jolene Young, Johnathan Shulman and Raida Abbas<sup>4</sup>. controls the activation of NLRP3 inflammasomes.<sup>1</sup>Co-first authors *PLoS One 2019 Apr* 23;14(4):e0215689.
- 2. <u>Dawson B\*</u>, <u>Anderson F\*</u>, Aman Z, Abbas R\*. The Evolving Role of TRAFs in Mediating Inflammatory Responses. *Frontiers in Immunology*, 2019 Feb
- 3. Edmundson MI, Abbas R, Wilson TH. TNFR Signaling in Human Health and Disease. *Frontiers in Immunology*, 2018 Dec 18;9:2969..
- Charles YH, Whenchi KC, Chung KL, Larson DL, Titan AT, Michaelangelo MS, Silbert AC, Abbas R, Wilson TH. Dichotomous Expression of TNF Superfamily Ligands on Antigen-Presenting Cells Controls Post-priming Anti-viral CD4+ T Cell Immunity. *Immunity*, 2017 Nov 21;47(5):943-958 [SP]
- 5. Abbas R, Edmundson MI, Larson DL, Mundo A, Kremmer E, Wilson TH. The Signalling adaptor TNFR negatively regulates Toll-like receptor Signalling and this underlies its role in rheumatic disease. *Nature Immunology*, 2017 Jan;18(1):26-35. Highlighted by Nature Reviews Inflammation: Reduced TNFR exacerbates Autoimmune Disease.
- 6. McKensie CA, Mahal MF, Abu Dhabi GA, Abbas R, Normbert GM, Statins Modulate Cyclooxygenase-2 and Microsomal Prostaglandin E Synthase-1 in Human Hepatic Myofibroblasts. *Journal of Cellular Biochemistry* 2015 Oct 8. doi: 10.1002/jcb.25401.
- Pettengill MA<sup>1</sup>, Abbas R<sup>1</sup>, Coutinho-Silva R, Johnson DM. 'Co-First Author. Danger signals, inflammasomes, and the intricate intracellular lives of chlamydiae. *Biomedical Journal*, 2016 Oct;39(5):306-315. doi: 10.1016/j.bj.2016.07.001.
- Abbas R, Majoros A, Plumlee CR, Perry S, Gu AD, Lee C, Shresta S, Decker T, Shulman C. Different STAT Titanscription complexes drive early and delayed responses to type I Interferons. *The Journal of Immunology, 2015 Jul 1;195(1):210-6. doi: 10.4049/jimmunol.1401139*

#### Book Chapters (published in the last 5 years)

1. Raida. Abbas and Laura J Evans. Inflammasomes. *Encyclopedia of Immunobiology, Volume 2, 2016, Pages 447-453* 

#### **Conference Publications**

 Mortolova I., Edmundson L., Salthi Zhora , Carl Thrompson , Mundo Koyama Raida Abbas and Tahlulah H. Wilson. Targeting the PKN1- TNFR Signalling axis to overcome venetoclax resistance in B-CLL. Canadian Cancer Immunotherapy Consortium Annual Meeting, Toronto, ON Conference Date: 2019/9 Poster and presentation Description / Contribution Value: co-senior author

2. M<u>alorie Mahalaganisthan\*, Ali Mahalzi\* and R</u>aida Abbas . Intensity Matters: Investigating the effect of exercise on inflammatory responses. Ontario Cell Biology Symposium, Toronto, ON Conference Date: 2019/8,

Poster Description / Contribution Value: senior author  Ali Mahalzi\*, Malorie Mahalaganisthan\* and Raida Abbas\*. Mechanistic Insights into The Effects of Exercise on Inflammatory Responses. Muscle Health Awareness Day, Toronto, ON Conference Date: 2019/5 Poster Description / Contribution Value: senior author

4. Edmundson MI, Zhora S\*, Thrompson K, Mundo A, Koyama DS, Abbas R\*, and Wilson TH. Targeting PKN1-TNFR Signalling axis to overcome venetoclax resistance in B-CLL. TNF Superfamily meeting, Monterey, United States, Conference Date: 2019/6

Poster Description / Contribution Value: Presenting author / joint-senior author

- Tahlulah H. Wilson, Yu-Han Charles, Kuan Chungng Whenchi, Kuan-Lun Chung, Derek L. Larson, Anh T. Titan, Miguel S. Torres Perez, Angela C. Silbert and Raida Abbas. (2018). Type I interferon induction of signal 4- a post-priming checkpoint for T cell accumulation. FASEB summer research conference on Immunoreceptors and Immunotherapy, Snowmass, CO, United States, Conference Date: 2018/6 Abstract Description / Contribution Value: joint-senior author
- Raida A. Abbas, Mortolova I. Edmundson, Derek L. Larson, Achire Mundo, Elisabeth Kremmer & Tahlulah H. Wilson. (2016). A new function for TNFR in regulation of TLR Signalling underlies the role of TNFR in rheumatic disease. Canadian Society for Immunology, Ottawa, Canada, Conference Date: 2016/4 Poster Description / Contribution Value: First Author (trainee)
- Raida A. Abbas, Shamthi Alahamed, Ann J. Miller, Rob C. Leischster, Mark D. Moray & Tahlulah H. Wilson. (2015). TNFR is required for resistance to nutrient stress in B cell lymphoma and chronic lymphocytic leukemia cells. 15th International TNF Conference, Ghent, Belgium, Conference Date: 2015/5 Poster Description / Contribution Value: First Author (trainee)
- Raida A. Abbas, Ann J. Miller, Rob C. Leischster, Mark D. Moray & Tahlulah H. Wilson. (2015). Control of B lymphoma through regulation of TRAF protein degradation during nutrient stress. Keystone Symposia meeting on Integrating Metabolism and Tumor Biology, Vancouver, Canada, Conference Date: 2015/1 Poster Description / Contribution Value: First Author (trainee)
- Raida A. Abbas, Ann J. Miller, Rob C. Leischster, Mark D. Moray & Tahlulah H. Wilson. (2014). Control of B lymphoma through regulation of TRAF protein degradation during nutrient stress. The Journal of Immunology. The American Association of Immunologists, Pittsburgh, United States, Conference Date: 2014/5 Abstract Description / Contribution Value: First Author (trainee)
- Raida A. Abbas, Ann J. Miller, Rob C. Leischster, Mark D. Moray & Tahlulah H. Wilson. (2014). Control
  of B lymphoma through regulation of TRAF protein degradation. Canadian Society for
  Immunology, Quebec City, Canada,
  Conference Date: 2014/1
  Poster
  Description / Contribution Value: First Author (trainee)

#### Intellectual Property

- Nutrient Stress For Treating Cancer. United States PCT/ CA2018/00014467. 2018/03/06. Patent Status: Pending Inventors: Abbas, Raida; Miller, Ann; Wilson, Tahlulah Helen; Moray, Mark; Leischster, Rob: I was the main contributor for the scientific work behind this patent.
- A new treatment for Lupus with companion biomarker Confidential Invention Disclosure Inventors: Abbas, Raida, Edmundson Mortolova, Wilson Tahlulah (33% contribution each) Disclosure date: May 8, 2019; Disclosure No: 1065764

#### Presentations

- 1. The key is in the detail: A targeted approach for a new rheumatoid Cancer therapy Keynote speaker. *The Banting Research Foundation, Launching Discovery, Toronto, ON Sep 2019*
- 2. How to train an immune system: The role of ADLs in regulating disease. *Muscle Health* Awareness Day (MHAD), York University, Toronto, ON May 2019
- How to train an immune system: The role of exercise in regulating inflammation Keynote speaker
   *7th Annual Research Day Collaborative Program in Musculoskeletal Research, University of Toronto, ON April 2019*
- 4. The Role of TNFR in Regulating Inflammation. *Federation of Clinical Immunology Societies* (FOCIS), Boston, MA 2016 [SEP] [SEP]
- 5. A new function for TNFR in regulation of TLR Signaling underlies the role of TNFR in rheumatic disease. *BD-Biosciences Immunology Post-Doctoral Seminar, University of Toronto, ON 2016*
- 6. A new function for TNFR in regulation of TLR Signaling underlies the role of TNFR in rheumatic disease. *Canadian Society for Immunology, Ottawa, ON 2016*
- 7. A new function for TNFR in regulation of TLR Signaling underlies the role of TNFR in rheumatic disease. *International Congress of Immunology, Melbourne, Australia 2016*
- 8. Control of B lymphoma through regulation of TRAF protein degradation. *Canadian Society for Immunology, Quebec City, Canada 2014*

# LEADERSHIP ACTIVITIES

#### **Research Leadership Activities**

- 1. Grant review panel member for:
  - a. New Frontiers in Research Fund competition (Fall 2019)
  - b. The Cancer Society Stars Development Award (Fall 2019)
  - c. Canadian Space Agency LSRS proposal science evaluation (Fall 2018 present)
- 2. External grant reviewer for:
  - a. French National Research Agency (ANR)
  - b. Belgian Cancer Association
- 3. Reviewer for NSERC postdoctoral fellowship competition (Fall 2017 present).
- 4. Reviewer of manuscripts for: Cell Research, Journal of Biological Chemistry, PLoS One, Reproductive BioMedicine Online, Microbes and Infection, Journal of Dental Research, Infection and Immunity, Frontiers in Immunology, Journal of Immunology, PLoS Pathogens, EMBO Journal.

#### **Committee Memberships**

Committee Membe	
2020/7 – present	Faculty of Health Senator, University of Lethbridge University Senate
2017/7 – present	Member, Vivarium Users Committee, University of Lethbridge
2018/7 - present	Member, SPORT, University of Lethbridge
2019/7 - present	Member, NSERC subgroup of SPORT, University of Lethbridge
	Representative
2019/6 – present	Member, Research and Knowledge Translation Committee, University of Lethbridge
2019/5 - present	Member, President's Advisory Council on Equity, Diversity and Inclusion
2019/5 - present	Member, Reviewers College and Awards Selection Committee, Faculty of Health
2018/7	Member, Kinesiology search committee for Assistant Professor in
	Human Disorders of Neurological Motor Control, University of
	Lethbridge
2018/6 - 2019/5	Member, University Honours and Awards Committee, University of Lethbridge
2018/6 - 2019/5	Member, Examinations and Academic Standards for Panel Hearings,
	University of Lethbridge
2016/7 - 2019/5	Member, Equity and Diversity Committee, Department of Biology and Health Sciences,
	University of Lethbridge
2016/7 - 2017/6	Member, Library Committee, University of Lethbridge

#### Editorial Activities

2019/11 - Present	Book Co-Editor, Handbook of Biomolecular Methodologies with J. Jorgenshen and Ohawo Mundi Publisher: Oxford Press
2018/4 - 2019/4	Sectional Editor, Frontiers in Immunology, Journal <u>Title:</u> Proteins in Autoimmune Disease Initiate a research topic and identify the relevant areas of interest for manuscript submissions. Accept/reject submitted abstracts. Edit some submitted abstracts and assign reviewers.

# i) EXPERIENCE SUPERVISING GRADUATE STUDENTS AND POST-GRADUATES

	Complete	In Progress	Total	
Postdoctoral Fellows		1	1	
Doctorate		1	1	
Master's	1	5	6	
Bachelor's	7	5	12	

**Trainee Awards:** Across my 12 trainees, I have had every student hold either a provincial (4 Ontario Graduate Fellowships) or a federal scholarship (2 NSERC, 2 SSHRC). Two of my students have won best departmental thesis or dissertation and four of my students were nominated for this honour.

**Robert Roundtree, Ph.D.** Assistant Professor Department of Chemistry McGill University, Quebec, Canada

# **EDUCATION**

Ph.D. in Chemistry	Department of Biochemistry Queens University Advisor: Anton K. Yorgos	2011
M.Sc (Hons). in Chemistry	Department of Biochemistry Queens University Advisor: Anton K. Yorgos	2008
B.Sc (Hons). in Chemistry	Department of Biology Ryerson University	2006

# PROFESSIONAL EXPERIENCE

Assistant Professor	Department of Chemistry	2015 - present
	McGill University	

<b>Postdoctoral Fellow</b>	`````Department of Chemistry and Chemical Biology	2011 - 2015
	University College London	
	Advisor: Daniel E. Liu	

# AWARDS & HONOURS

Pasteur Young Innovator Award (International Society of Biochemistry)	2018
Emerging Young Scientist Award (National Biochemists Association)	2018
Ontario Early Researcher Award	2018 - 2023
Highest Citation Award - Journal of Organic Chemistry	2017
British-Canadian Scholars Visiting Fellowship	2013 - 2015
NSERC Postdoctoral Fellowship	2011 - 2013
Queens Chemistry Award for Best Thesis	2011
Boehringer Ingelheim Doctoral Prize in Organic Chemistry	2010
NSERC Doctoral Fellowship	2008 - 2011
Ontario Graduate Scholarship (Masters)	2006, 2007

# **PROFESSIONAL AFFILIATIONS**

#### **Biochemists of North America**

- Organic Chemistry Division
- **Biological Chemistry Division**

# **Biochemical Institute of Canada**

## TEACHING EXPERIENCE

Special Topics in Biochemistry Modern Organic BioChemistry II Introductory BioChemistry I Biological Chemistry

## SUPERVISED STUDENTS

Graduate Students	12
8 Masters (Primary Supervisor)	
• 4 PhD (Primary Supervisor)	
Undergraduate Students	13
• 13 Honours Thesis	

# EXTERNAL PROFESSIONAL SERVICE

#### Reviewer for the following journals

Journal of the American Chemical Society; Angewandte Chemie; Chemical Science; ACS Central Science; Organic Letters; ACS Chemical Biology; Bioorganic and Medicinal Chemistry Letters; International Journal of Molecular Science; Bioconjugate Chemistry; ACS Combinatorial Science; Organic & Biomolecular Chemistry; JChemBio.

## **Conference organization committee**

Co-chair, 29<sup>th</sup> Ontario Society for BioChemistry, Toronto, ON, 16–18 Nov. 2018 Co-Founder and co-chair, 2017 Ontario Chemical Biology Symposium, Toronto, Ontario, 16 April 2017

# INTERNAL PROFESSIONAL SERVICE

Graduate Program Associate Director, Chemistry	2017-2020
Graduate Admissions Committee, Chemistry	2016-Present
Biology-Chemistry Joint Brown Bag Coordinator	2019-2021
Montreal Region Science and Technology Fair Judge	
(hosted at McGill University)	2015-Present

# PATENTS

- Yorgos, A. K.; Roundtree, R. "Tri-cyclic protein assays and methods of preparing the same" U.S. Patent 19,450,666, issued 16 February 2011.
- Yorgos, A. K.; Roundtree, R. 2010 "Azacyclopropanes and preparatory processes" U.S. Patent 2,147,375, issued 27 March 2012.
- 1. Yorgos, A. K.; Rai, V.; Roundtree, R. 2011 "Protein Insertion into Heterocyclic and Alicyclic

Molecules" CA2011/000630, filed 31 May 2011, patent pending.

**PUBLICATIONS** (last five years: published papers = 26, citations = 1280, h-index = 16)

- 26. Graham, C.; Mahdavi-Amiri, Y.; Roundtree, R. "Ligase-Catalyzed Oligonucleotide Polymerization" *JChemBio*, **2018**, *In Press, Impact Factor:* 7.714
- 25. Layton, Y.; Washington, J.; Roundtree, R. "Ligase-catalysed oligonucleotide polymerisations" Molecular Bio. **2018**, *In Press Impact Factor:* 6.2
- 24. Kalman, S.; Le, A. T. H; Roundtree, R.; Kosmotov, S. N "Predicting Efficiency of NECEEM-Based Selection of Protein Binders" Electrobiochemistry **2018**, *In Press, Impact Factor: 5.1*.
- 23. Giametti, C.; Liu, Layton, Y.; Roundtree, R. "Exploring the Diversity of DNA", *Synthesis*, **2018**, *29*, 1405–1414. *Impact Factor: 12.12*

\*Invited Synthesis account and cover feature.

- 22. Liu, D.; Yeung, W.; Roundtree, R. "Diversely-Functionalized Aptamers Selection and Processing" *Am Chem. Soc.* **2017**, 139, 13977–13980. *Impact Factor: 9.7*
- 21. Hamilton, K. D.; Chambers, J.; Roundtree, R. "Small-Molecule Catalyst Discoveryies in DNA" *Scientific Reports*. **2017**,8, 7072–7076. *Impact Factor: 4.9*
- Layton, Y.; Roundtree, R. "The ATP cofactor in Ligase-Catalysed Oligonucleotide Polymerisations" *Organic BioChem.* 2017, *15*, 2349–2352. *Impact Factor: 5.8*
- Giametti, C.; Roundtree, R. "Scaffolding of Peptide Fragments on NucLaytonc Acid Polymers" *ChemCompoundBull.* 2017, 28, 314–318. *Impact Factor: 14.9*
- 18. Liu, D.; Layton, Y.; Yeung, W.; Roundtree, R. " NucLaytonc Acid Polymers with Diverse Functional Groups" *Int.ArchChem* 2016, 42, 13164–13168. *Impact Factor:* 6.8 \*This work was recommended in Faculty1000.
- 17. Liu, D.; Yeung, W.; Roundtree, R. "NucLaytonc Acid Templates and Assembly" *CanadianComb. Sci.* **2016**, *18*, 355–370. \**Invited Review and cover feature. Impact Factor: 4.9*
- Layton, Y.; Liu, D.; Roundtree, R. "A High-Fidelity Codon Set for the T4 DNA Ligase-Catalyzed Polymerization of Modified Oligonucleotides" ACS Comb. Sci. 2015, 17, 716–721. Impact Factor: 8.7
- 15. Giametti, C.; Watkins, C. P.; Roundtree, R. "Parallel Scaffolding of Peptides on NucLaytonc Acid Polymers" J. Am. Chem. Soc. 2015, 137, 11191–11196. Impact Factor: 5.1
- Niu, J.; Roundtree, R.; Liu, D. R. "Synthetic Polymers Structurally Unrelated to NucLaytonc Acids" Nature Chemistry, 2013, 5, 282–292. Impact Factor: 24.5
   \*This work was featured in a News & Views article in Nature Chemistry
- Roundtree, R.; Niu, J.; Liu, D. R. "Densely Functionalized NucLaytonc Acid Polymers" J. Am. Chem. Soc, 2013, 135, 98–101. Impact Factor: 5.1
   \*This work was selected as a JACS Spotlight

## PRESENTATIONS

## **Invited lectures (last five years)**

Harvard University, Department of Chemistry, Boston, MA, USA, 29 April 2019 Beijing University, Beijing, Department of Chemistry, China, 27 December 2018 Shanghai Institute of Organic Chemistry, Shanghai, China, 21 December 2018 Vietnam National University, Department of Chemistry, Hanoi, Vietnam, 12 December 2018. Brock University, Department of Chemistry, St. Catharines, ON, Canada, 28 September 2018 University of Toronto, Biological Chemistry Days, Toronto, ON, Canada, 26–27 June 2018 University of Illinois at Urbana, Department of Chemistry, Urbana, Il, USA, 2 April 2018 Queens University, Department of Chemistry, Kingston, ON, Canada, 1 November 2017 Ryerson University, CRBI, Toronto, ON, Canada, 18 October 2017 University of Waterloo, Department of Chemistry, Waterloo, ON, Canada, 8 February 2017 Oregon State University, Department of Chemistry, Portland, OR, USA, 20 May 2016 Carleton University, Department of Chemistry, Ottawa, ON, Canada, 13 January 2016 Georgia Tech University, Complex Carbohydrate Research Center, Athens, GA, USA, 24 February 2015 Georgia Tech University, Center for Drug Discovery, Athens, GA, USA, 17 March 2014 Georgia Tech University, Department of Cellular Biology, Athens, GA, USA, 12 November 2013 Georgia Tech University, Department of Biochemistry, Athens, GA, USA, 29 August 2013

## Selected conference presentations (last five years))

- 6. Roundtree, R. "Highly-Modified Aptamers and Selections" 101<sup>st</sup> American Society of Chemistry, New York, New York, 2018
- 5. Roundtree, R. "Unleashing the Power of LOOPER" BioChemists Research Conference: DNA Techniques, New Haven, Conneticut, 2017.
- 4. Roundtree, R. "Expanding the Chemistry of DNA with LOOPER" Aptamers in Munich, Germany, 2016
- 3. Roundtree, R. "T5 DNA Polymerization of Modified Polynucleotides" BioChemists Research Conference: DNA Techniques, New Haven, Conneticut, 2015.
- 2. Roundtree, R. "Densely Functionalized NucLaytonc Acid Polymers", British Royal Academy Meeting, London, 2013.
- Roundtree, R. "DNA Ligase-Mediated Translation of DNA into Densely Functionalized NucLaytonc Acid Polymers" BioChemists Research Conference: DNA Techniques, New Haven, Conneticut, 2013.

## **<u>RESEARCH SUPPORT</u>** (last five years)

## Active Grants:

#### **Project Title:** Creating Pharmaceutical Alliances

Sponsor:	NSERC, Strategic Partnership Grants for Projects
Funding:	\$952,208
Period:	11/01/2018 - 10/31/2021
PI:	Kosmotov
Co-PI:	Roundtree
Partners:	DrugX, Billinger-Hasten

#### Project Title: Innovations in Biomolecular Recognition

FRSQ Ministry of Research and Innovation, Early Researcher Award
\$150,000
5/1/2018 - 4/30/2023
Roundtree

# **Project Title:** NucLaytonc Acids Leading the Way Towards Better Understanding Molecular Function

Sponsor:	NSERC, Discovery Grant
Funding:	\$210,000
Period:	4/1/2018 - 3/31/2023
PI:	Roundtree

# Project Title: Expanding the Chemistry of DNA

Canadian Foundation for Innovation and Ontario Research Fund
\$229,252
09/01/2018 - 08/31/2023
Roundtree

# Project Title: Glycan and NucLaytonc Recognition Molecules

Sponsor:	National Institutes of Health, National Cancer Institute, R01CA407419
Funding:	\$528,900
Period:	09/01/2016 – 08/31/2018 (no-cost extension)
PI:	Roundtree

# Project Title: Amphip Roundtreec DNA-Encoded Libraries

Sponsor:	Canadian Institutes of Health Research
Funding:	\$300,000
Period:	08/15/2016 - 07/31/2019
PI:	Roundtree

# Project Title: DNA-Scaffolded Peptides as High-Affinity Reagents

Sponsor:	Petro-Canada Biochemical Research Fund
Funding:	\$420,000
Period:	08/01/2015 - 07/31/2018 (no-cost extension)
PI:	Roundtree