

**Stephen M. Lewis, Ph.D.**

**EDUCATION:**

- 1998-2004                    **Ph.D.** in Microbiology & Immunology  
**Dalhousie University**, Halifax, Nova Scotia  
*Doctoral Thesis:* “Multiple ArfGAPs regulate vesicular transport”  
*Supervisor:* Dr. Gerald C. Johnston
- 1994-1998                    **B.Sc. (Hons.)** in Microbiology & Immunology  
**Dalhousie University**  
*Honours Thesis:* “Identification of essential domains in the small fusion-inducing protein of reovirus”  
*Supervisor:* Dr. Roy Duncan

**RESEARCH EXPERIENCE:**

- April 2013 – present            *Assistant Scientific Director*  
**Atlantic Cancer Research Institute**, Moncton, New Brunswick
- July 2012 – present            *Adjunct Professor*  
Department of Chemistry & Biochemistry  
**Université de Moncton**, Moncton, New Brunswick
- October 2010 – present        *Senior Scientist*  
**Beatrice Hunter Cancer Research Institute**, Halifax,  
Nova Scotia
- December 2009 – present      *Adjunct Professor*  
Department of Biology  
**University of New Brunswick (Saint John)**, Saint John,  
New Brunswick
- October 2008 – present        *Adjunct Assistant Professor*  
Department of Microbiology & Immunology  
**Dalhousie University**
- January 2008 – present        *Research Scientist*  
**Atlantic Cancer Research Institute**
- March 2004 –  
December 2007                *Post-doctoral Fellow*  
**University of Ottawa**, Ottawa, Ontario  
*Project:* Identification and characterization of XIAP internal ribosome entry site (IRES) *trans*-acting factors.  
*Supervisor:* Dr. Martin Holcik

May 1998 -  
September 1998

**Research Technician**  
**Dalhousie University**

*Project:* Generation of reassortant avian reovirus isolates for genetic analysis.

*Supervisor:* Dr. Roy Duncan

**GRANTS:**

- 2014-2016 “Use of a novel extracellular microvesicle capture method for the enrichment and identification of pancreatic cancer biomarkers” Innovation Grant, Canadian Cancer Society Research Institute (CCSRI) – New Brunswick Health Research Foundation (NBHRF), \$197,500 (Dr. Rodney J. Ouellette and Dr. Anirban Ghosh, Co-principal applicants)
- 2014-2016 “Characterization of novel miRNAs involved in breast cancer metastasis,” Breast Cancer Society/QEII Foundation Awards for Breast Cancer Research, \$60,000 (Dr. Guillaume Desnoyers, Co-applicant)
- 2013-2014 “Exploration of the mechanism by which eIF3e controls epithelial-to-mesenchymal transition in lung cancer,” Lung Cancer Research Foundation (LCRF), \$50,000 (USD)
- 2013-2017 “Synthetic lethality screen of tumour suppressor pathways for therapeutic compound development” Co-applicant, Atlantic Innovation Fund, Atlantic Canada Opportunities Agency, \$2,897,602 (Dr. Rodney J. Ouellette, principal applicant)
- 2012-2015 “Characterization of a novel role for eIF3e in epithelial-to-mesenchymal transition in breast cancer,” Canadian Breast Cancer Foundation – Atlantic (CBCF-Atlantic), \$150,000
- 2011-2012 “Translational control of Pax5 in B-cell development and lymphomagenesis,” Seed Operating Grant, NBHRF, \$25,000
- 2010-2013 “Understanding the cytoplasmic roles of hnRNP A1,” Operating Grant – Regional Partnerships Program, Canadian Institutes of Health Research (CIHR), ROP-108749, \$285,781
- 2009-2012 “Identification of the mRNA targets of eIF3e in breast cancer,” CBCF-Atlantic, \$173,244
- 2009-2015 The Terry Fox Foundation Strategic Health Research Training Program in Cancer Research at CIHR, Co-applicant, CIHR, \$1,950,000 (Dr. Gerald C. Johnston, principal applicant)
- 2008 "Translational control in B-cell development and lymphomagenesis," Start-Up Grant, Research Innovation Fund, New Brunswick Innovation Foundation (NBIF), \$50,000

## **HONOURS & AWARDS:**

2013	New Brunswick Health Researcher of the Month, September 2013
2010-2015	New Investigator Salary Award – Regional Partnerships Program, CIHR, RSH-108667, \$150,000
2002	Dalhousie Cancer Research Group Travel Award, \$1,000
2000-2002	Cancer Research and Education Nova Scotia (CaRE) Studentship, \$30,000
1998	Nova Scotia Links Summer Research Internship, \$2,500
1994-1995	Lockward Memorial Scholarship, Dalhousie University, \$4,000

## **PROFESSIONAL ACTIVITIES:**

### **Grant Review**

2014	Member, New Investigators ‘A’ Peer Review Committee, CIHR
2013 - present	Chair, Fellowships Committee, CBCF-Atlantic
2012 - 2014	Chair, Research Grants Committee, CBCF-Atlantic
2012 - 2014	Member, Fellowships – Post-PhD Review Committee, CIHR
2010 - 2012	Co-Chair (with Dr. Neale Ridgeway), Scientific Review Committee, The Terry Fox Foundation Strategic Health Research Training Program in Cancer Research at CIHR (Cancer Research Training Program [CRTP])
2010	Member, Scientific Review Committee, Breast Cancer Society of Canada/QEII Foundation Awards for Breast Cancer Research / Beatrice Hunter Cancer Research Institute Awards for Lung Cancer Research
2010 - 2012	Scientific Officer, Research Grants Committee, CBCF-Atlantic
2009	Member, Scientific Review Committee, The Terry Fox Foundation Strategic Health Research Training Program in Cancer Research at CIHR (CRTP)
2008 - 2010	Member, Research Grants Committee, CBCF-Atlantic
2008	External Reviewer, Operating Grants, Neurosciences-A Panel, CIHR
2007	External Reviewer, Health Research Grants Competition, Nova Scotia Health Research Foundation (NSHRF)
2006	External Reviewer, China-Canada Joint Health Research Initiative – Grants Program, CIHR

## Manuscript Review

Ad-hoc reviewer for:

*Antioxidant & Redox Signaling* (2010)  
*Apoptosis* (2010, 2011)  
*Arteriosclerosis, Thrombosis, and Vascular Biology* (2008)  
*BBA-Molecular Cell Research* (2007, 2013, 2015)  
*British Journal of Cancer* (2013)  
*Cellular Oncology* (2013)  
*Central European Journal of Biology* (2012)  
*The EMBO Journal* (2009)  
*Experimental Cell Research* (2008, 2011)  
*Expert Opinion on Therapeutic Targets* (2009, 2010)  
*Journal of Cancer Science & Therapy* (2012 – 2 manuscripts)  
*Journal of Visualized Experiments* (2013)  
*Molecular Oncology* (2014)  
*Nucleic Acids Research* (2008)  
*PLOS One* (2014)

## Committee Memberships

2014 - present	Member, National Grants Committee, Canadian Breast Cancer Foundation
2014	Member, Planning Committee, 2014 New Brunswick Health Research Foundation Health Research Conference (2014 Conference President)
2013 - present	Chair, Membership Committee, Beatrice Hunter Cancer Research Institute
2013	Member, Planning Committee, 2013 New Brunswick Health Research Foundation Health Research Conference
2013 - present	Member, Board of Directors, Beatrice Hunter Cancer Research Institute, Halifax, Nova Scotia
2012	External Examiner, Ph.D. Thesis Examination Committee for Maria Licursi, Department of Microbiology & Immunology, Memorial University, St. John's, Newfoundland
2012	Member, Planning Committee, 2012 New Brunswick Health Research Foundation Health Research Conference
2002-2003	Member, Academic Planning Committee, Department of Microbiology & Immunology, Dalhousie University
2002	Member, Distinguished Leaders in Medicine Planning Committee, Faculty of Medicine, Dalhousie University
2001-2002	Member, Graduate Studies Committee, Department of Microbiology & Immunology, Dalhousie University

2001-2002 Representative for the Department of Microbiology & Immunology,  
Faculty of Medicine Graduate Students Society, Dalhousie University

### **TEACHING EXPERIENCE:**

#### **Personnel and Trainees Supervised (Students, Post-doctoral Fellows, Technicians)**

2015 Ms. Lynn Courteau, M.Sc., Research Technician

2014-2015 Ms. Dominique Comeau, Summer Undergraduate Student (recipient of a Canadian Breast Cancer Foundation Studentship); Honour's Thesis Student, Université de Moncton

2014 Ms. Florence Wong, Summer Undergraduate Student (recipient of a TD Bank Summer Internship in Cancer Research)

2012-2014 Dr. Guillaume Desnoyers, Post-doctoral Fellow (recipient of CIHR Fellowship, FRSQ Fellowship [declined], and CRTP Fellowship [declined])

2011-2014 Dr. Michael Wall, Post-doctoral Fellow (recipient of a Terry Fox Research Institute/New Brunswick Health Research Foundation Fellowship Award)

2011-2012 Ms. Anuradha Sakhuja, M.Sc., Research Technician

2010-present Ms. Laura Frost, M.Sc., Research Technician

2009-2010 Ms. Samantha Dew, Field Placement, Biotechnology Program at Canadore College (North Bay, ON)

#### **Courses**

2002-2003 **Dalhousie University**  
***Problem-Based Learning (PBL) Tutor, College of Pharmacy:*** Responsible for guiding students through the problem-based learning process, and helping them to develop problem solving skills.

2001-2002 **Dalhousie University**  
***Teaching Assistant:*** Assisted Associate Professor Christine Barnes with her course "Microbial Genetics" (MICI 3033). Duties included grading all assignments and examinations.

2001-2002 **Dalhousie University**  
***Teaching Assistant:*** Assisted Senior Instructor Dr. Lois Murray with her course "Advanced Laboratory Techniques" (MICI 4602). Duties included assisting students with laboratory techniques, some experimental design, and some grading.

2000-2001

**Dalhousie University**

**Teaching Assistant:** Assisted Professor Gerald C. Johnston with his course “Microbial Genetics” (MICI 3033). Duties included presenting some lectures, helping compose assignments and exams, grading all written work, and determining final grades.

**PUBLICATIONS:**

**Articles in Peer-Reviewed Journals** (Authors under my supervision are underlined)

1. **Lewis, S.M.**, P.P. Poon, R.A. Singer, G.C. Johnston, and A. Spang. (2004) The ArfGAP Glo3 is required for the generation of COPI vesicles. *Mol. Biol. Cell* **15**, 4064-4072. (Impact Factor [IF]=4.5)
2. **Lewis, S.M.** and M. Holcik. (2005) IRES in distress: Translational regulation of the inhibitor of apoptosis proteins XIAP and HIAP2 during cell stress. *Cell Death Differ.* **12**, 547-553. (IF=8.4)
3. Holcik, M., T. Graber, **S.M. Lewis**, C.A. Lefebvre, E. LaCasse, and S. Baird. (2005) Spurious splicing within the XIAP 5' UTR occurs in the Rluc/Fluc but not the  $\beta$ gal/CAT bicistronic reporter system. *RNA* **11**, 1605-1609. (IF=4.6)
4. Ungureanu, N.H., M. Cloutier, **S.M. Lewis**, N. de Silva, J.D. Blais, J.C. Bell, and M. Holcik. (2006) IRES-mediated translation of Apaf-1, but not XIAP, is regulated during UV-induced cell death. *J. Biol. Chem.* **281**, 15115-15163. (IF=4.6)
5. Graber, T.E., **S.M. Lewis**, and M. Holcik. (2006) An approach to whole-genome identification of IRES elements. *Curr. Genomics* **7**, 205-215. (IF=2.9)
6. **Lewis, S.M.**, A. Veyrier, N.H. Ungureanu, S. Bonnal, S. Vagner, and M. Holcik. (2007) Subcellular relocalization of a *trans*-acting factor regulates XIAP IRES-dependent translation. *Mol. Biol. Cell* **18**, 1302-1311. (IF=4.5)
7. Baird, S.D., **S.M. Lewis**, M. Turcotte, and M. Holcik. (2007) A search for structurally similar cellular internal ribosome entry sites. *Nucleic Acids Res.* **35**, 4664-4677. (IF=8.8)
8. Cammas, A., F. Pileur, S. Bonnal, **S.M. Lewis**, N. Leveque, M. Holcik, and S. Vagner. (2007) Cytoplasmic relocalization of heterogeneous nuclear ribonucleoprotein A1 controls translation initiation of specific mRNAs. *Mol. Biol. Cell* **18**, 5048-5059. (IF=4.5)
9. Galbán, S., Y. Kuwano, R. Pullmann, Jr., J.L. Martindale, H.H. Kim, A. Lal, K. Abdelmohsen, X. Yang, Y. Dang, J.O. Liu, **S.M. Lewis**, M. Holcik, and M. Gorospe. (2008) RNA-binding proteins HuR and PTB promote the translation of Hypoxia-Inducible Factor-1 $\alpha$ . *Mol. Cell. Biol.* **28**, 93-107. (IF=5.0)

10. **Lewis, S.M.**, S. Cerquozzi, T.E. Graber, N.H. Ungureanu, M. Andrews, and M. Holcik. (2008) The eIF4G homologue DAP5/p97 supports the translation of select mRNAs during endoplasmic reticulum stress. *Nucleic Acids Res.* **36**, 168-178. (IF=8.8)
11. **Lewis, S.M.** and M. Holcik. (2008) For IRES *trans*-acting factors, it is all about location. *Oncogene* **27**, 1033-1035. (IF=8.6)
12. Cammas, A., **S.M. Lewis**, S. Vagner, and M. Holcik. (2008) Post-transcriptional control of gene expression through subcellular relocalization of mRNA binding proteins. *Biochem. Pharmacol.* **76**, 1395-1403. (IF=4.6)
13. Zhao, T.T., T.E. Graber, L.E. Jordan, M. Cloutier, **S.M. Lewis**, I. Goulet, J. Cote, and M. Holcik. (2009) hnRNP A1 regulates UV-induced NF- $\kappa$ B signalling through destabilization of cIAP1 mRNA. *Cell Death Differ.* **16**, 244-252. (IF=8.4)
14. Arseneau, J.-R., M. Laflamme, **S.M. Lewis**, E. Maicas, and R.J. Ouellette. (2009) Multiple isoforms of *PAX5* are expressed in both lymphomas and normal B-cells. *Br. J. Haematol.* **147**, 328-338. (IF=4.9)
15. Benjamin, J.J.R., P.P. Poon, **S.M. Lewis**, A. Auger, T.A. Wong, R.A. Singer, and G.C. Johnston (2011) The yeast Arf GTPase-activating protein Age1 is regulated by phospholipase D for post-Golgi vesicular transport. *J. Biol. Chem.* **286**, 5187-5196. (IF=4.6)
16. Durie, D., **S.M. Lewis**, U. Liwak, M. Kisilewicz, M. Gorospe, and M. Holcik (2011) RNA-binding protein HuR mediates cytoprotection through stimulation of XIAP translation. *Oncogene* **30**, 1460-1469. (IF=8.6)
17. Liwak, U., N. Thakor, L.E. Jordan, R. Roy, **S.M. Lewis**, O. Pardo, M. Seckl, and M. Holcik (2012) Tumour suppressor PDCD4 represses IRES-mediated translation of anti-apoptotic proteins and is regulated by S6 Kinase 2. *Mol. Cell. Biol.* **32**, 1818-1829. (IF=5.0)
18. Gillis, L.D. and **S.M. Lewis** (2013) Decreased expression of eIF3e/Int6 causes epithelial-to-mesenchymal transition in breast epithelial cells. *Oncogene* **32**, 3598-3605. (IF=8.6)
19. Balci, T.B., S.V. Prykhozhiy, E.M. Teh, S.I. Da'as, E. McBride, R. Liwski, I.C. Chute, D. Léger, **S.M. Lewis**, and J.N. Berman (2014) A transgenic zebrafish model expressing *KIT*-D816V recapitulates features of aggressive systemic mastocytosis. *Br. J. Haematol.* **167**, 48-61. (IF=4.9)
20. Ghosh, A., M. Davey, I.C. Chute, S.G. Griffiths, S. Lewis, S. Chacko, D. Barnett, N. Crapoulet, S. Fournier, A. Joy, M.C. Caissie, A.D. Ferguson, M. Daigle, M.V. Meli, **S.M. Lewis**, and R.J. Ouellette (2014) Rapid isolation of extracellular vesicles from cell culture and biological fluids using a synthetic peptide with specific affinity for heat shock proteins. *PLoS One* **9**, e110443. (IF=3.5)

21. Deveau, A.P., A.M. Forrester, A.J. Coombs, G.S. Wagner, C. Grabher, I.C. Chute, D. Léger, M. Mingay, G. Alexe, V. Rajan, R. Liwski, M. Hirst, K. Stegmaier, **S.M. Lewis**, A.T. Look, and J.N. Berman (2015) Epigenetic therapy restores normal hematopoiesis in a zebrafish model of *NUP98-HOXA9*-induced myeloid disease. *Leukemia* (in press), doi: 10.1038/leu.2015.126. (IF=9.4)
22. Desnoyers, G., L.D. Frost, L. Courteau, M.L. Wall, and **S.M. Lewis** (2015) Decreased eIF3e expression can mediate epithelial-to-mesenchymal transition through activation of the TGF- $\beta$  signaling pathway. *Mol. Cancer Res.* (in press), doi: 10.1158/1541-7786.MCR-14-0645. (IF=4.5)

**Abstracts** (Presenting author is *italicized*; authors under my supervision are underlined)

1. *Shmulevitz, M.*, J. Shou, **S.M. Lewis**, and R. Duncan. (1998) Fusion-associated small transmembrane (FAST) proteins of fusogenic reoviruses: a new class of fusion proteins. 17<sup>th</sup> Annual Meeting of the American Society for Virology, University of British Columbia, July 11-15, 1998.
2. **Lewis, S.M.**, R.A. Singer, and G.C. Johnston. (2000) Mutational suppressors of the temperature-sensitive ArfGAP Gcs1-28. Northeast Regional Yeast Meeting, Syracuse University, July 12-14, 2000.
3. **Lewis, S.M.**, R.A. Singer, and G.C. Johnston. (2001) Copy suppressors of the temperature-sensitive ArfGAP Gcs1-28. CaRE Cancer Research Symposium and 3<sup>rd</sup> Annual General Meeting, Dalhousie University, November 8, 2001
4. **Lewis, S.M.**, R.A. Singer, and G.C. Johnston. (2002) The putative ArfGAP Age1 can compensate for inadequate Gcs1 and Glo3 ArfGAP function in retrograde vesicular transport. Yeast Genetics and Molecular Biology Meeting, University of Wisconsin (Madison), July 30-August 4, 2002.
5. **Lewis, S.M.**, R.A. Singer, and G.C. Johnston. (2002) Inadequate Gcs1 and Glo3 ArfGAP activity in retrograde transport can be compensated for by increased dosage of the Age1 ArfGAP. CaRE Cancer Research Symposium and 4<sup>th</sup> Annual General Meeting, Dalhousie University, October 23, 2002.
6. **Lewis, S.**, P. Poon, R. Singer, *G. Johnston*, and A. Spang. (2004) Intact ArfGAP function is required for the generation of COPI vesicles. Yeast Genetics and Molecular Biology Meeting, University of Washington, July 27-August 1, 2004.
7. **Lewis, S.** and M. Holcik. (2005) The heterogeneous nuclear ribonucleoprotein hnRNP A1 interacts with the internal ribosome entry site of the X-linked inhibitor of apoptosis (XIAP) and modulates XIAP expression. RNA 2005 – 10<sup>th</sup> Annual Meeting of the RNA Society, Banff, Alberta, Canada, May 24-29, 2005.

8. *Graber, T., S. Lewis, and M. Holcik. (2005) Identification of proteins enhancing cap-independent translation of the inhibitor of apoptosis protein HIAP2 and their role in ER stress-induced apoptosis. RNA 2005 – 10<sup>th</sup> Annual Meeting of the RNA Society, Banff, Alberta, Canada, May 24-29, 2005.*
9. *Ungureanu, N.H., M. Cloutier, S.M. Lewis, N. de Silva, J.D. Blais, J.C. Bell, and M. Holcik. (2006) IRES-mediated translation of Apaf-1, but not XIAP, is regulated during UV-induced cell death. 7<sup>th</sup> Conference on Signalling in Normal and Cancer Cells, Banff, Alberta, Canada, March 3-7, 2006.*
10. *Lewis, S.M., N.H. Ungureanu, and M. Holcik. (2006) Subcellular localization of an IRES trans-acting factor regulates XIAP translation. Translational Control, Cold Spring Harbor Laboratory, New York, September 6-10, 2006.*
11. *Cerquozzi, S., N.H. Ungureanu, M. Andrews, S.M. Lewis, and M. Holcik. (2006) IRES-mediated translation of p97/DAP5 is enhanced during endoplasmic reticulum stress. Translational Control, Cold Spring Harbor Laboratory, New York, September 6-10, 2006.*
12. *Poon, P.P., J.J.R. Benjamin, S.M. Lewis, A. Auger, T.A. Wong, R.A. Singer, and G.C. Johnston. (2007) Age1 Arf GTPase-activating protein activity for post-Golgi transport is mediated by a phosphatidylinositol-transfer protein in yeast. FASEB Summer Research Conference: Arf Family GTPases, Il Ciocco, Tuscany, June 22-27, 2007.*
13. *Veyrier, A., F. Pileur, S. Bonnal, S.M. Lewis, M. Holcik, and S. Vagner. (2007) Cytoplasmic relocalization of hnRNP A1 controls translation initiation of specific mRNAs. EMBO Conference on Protein Synthesis and Translational Control, EMBL Heidelberg, Germany, September 12-16, 2007.*
14. *Lewis, S.M., A. Cammas, S. Vagner, and M. Holcik. (2008) Subcellular relocalization of an RNA binding protein regulates cell death by controlling translation of specific mRNAs. Apoptosis 2008: from mechanisms to applications, Luxembourg, January 22-26, 2008.*
15. *Poon, P.P., J. Benjamin, S. Lewis, A. Auger, T. Wong, R. Singer, and G. Johnston. (2008) Age1 ArfGAP activity for post-Golgi transport is mediated by a yeast phosphatidylinositol transfer protein. Yeast Genetics and Molecular Biology Meeting, University of Toronto, July 22-27, 2008.*
16. *Zhao, T.T., T.E. Graber, L.E. Jordan, M. Cloutier, S.M. Lewis, I. Goulet, J. Côté, and M. Holcik. (2008) hnRNP A1 regulates UV-induced NFκB signaling via destabilization of cIAP1 mRNA. Translational Control, Cold Spring Harbor Laboratory, New York, September 3-7, 2008.*

17. *Jordan, L.E., S.M. Lewis, O. Pardo, M. Seckl, and M. Holcik. (2010) Loss of PDCD4 derepresses translation of antiapoptotic genes in glioblastoma. Protein Translation and Cancer, Loews Coronado Bay Resort, Coronado, California, February 3-6, 2010.*
18. *Jordan, L., S. Lewis, O. Pardo, M. Seckl, and M. Holcik. (2010) Loss of PDCD4 derepresses translation of antiapoptotic genes in glioblastoma. RNA 2010 – 15<sup>th</sup> Annual Meeting of the RNA Society, University of Washington, June 22-26, 2010.*
19. *Chute, I.C., A.D. Ferguson, D. Léger, and S.M. Lewis (2010) Translational profiling of reduced eIF3e expression in the normal human breast epithelial cell line MCF-10A. Translational Control, Cold Spring Harbor Laboratory, New York, September 13-17, 2010.*
20. *Balci, T.B., A.J. Coombs, C. Grondin, S.I. Da'as, I. Chute, D. Léger, A.A. Ferrando, S. Lewis, and J.N. Berman (2011) Using the Zebrafish as a tool for modeling systemic mastocytosis. 53<sup>rd</sup> Annual Meeting of the American Society of Hematology, San Diego, California, December 10-13, 2011.*
21. *Forrester, A.M., A.J. Coombs, E.R. McBride, I. Chute, D. Léger, S. Lewis, C. Grabher, T. Look, and J.N. Berman (2011) NUP98-HOXA9 drives high-risk myeloid disease in Zebrafish – an *in vivo* platform to study interacting genes and perform drug discovery. 53<sup>rd</sup> Annual Meeting of the American Society of Hematology, San Diego, California, December 10-13, 2011.*
22. *Wall, M.L., A. Sakhuja, and S.M. Lewis (2012) The role of arginine methylation in hnRNP A1 cytoplasmic activity. Translational Control, Cold Spring Harbor Laboratory, New York, September 4-8, 2012*
23. *Gillis, L.D., I.C. Chute, D. Léger, and S.M. Lewis (2012) eIF3e contributes to the control of epithelial-to-mesenchymal transition (EMT) by regulating the translation of mRNAs that encode proteins with roles in EMT. Translational Control, Cold Spring Harbor Laboratory, New York, September 4-8, 2012.*
24. *Wall, M.L. and S.M. Lewis (2012) The role of critical arginine residues in hnRNP A1 cytoplasmic activity. 2012 BHCRI Cancer Research Conference, Dalhousie University, Halifax, Nova Scotia, Canada, November 5-6, 2012.*
25. *Deveau, A.P., A.M. Forrester, A.J. Coombs, I. Chute, D. Léger, S. Lewis, C. Grabher, A.T. Look, and J.N. Berman (2012) Epigenetic therapy inhibits NUP98-HOXA9-mediated myeloid disease – decitabine and valproic acid work synergistically to rescue normal hematopoiesis in transgenic zebrafish. 2012 BHCRI Cancer Research Conference, Dalhousie University, Halifax, Nova Scotia, Canada, November 5-6, 2012.*

26. *Prykhozhiy, S., T.B. Balci, E.M. Teh, S.I. Da'as, E. McBride, R. Liwski, I. Chute, D. Léger, S. Lewis, and J.N. Berman* (2012) Dissection of cell signaling and transcriptional regulation downstream of C-KIT (D816V) in the Zebrafish transgenic model of mastocytosis. 2012 BHCRI Cancer Research Conference, Dalhousie University, Halifax, Nova Scotia, Canada, November 5-6, 2012.
27. *Salsman, J., S. Lahsae, S. Montgomery, S. Lewis, and G. Dellaire* (2012) Dissecting PML-regulated signaling using gene chip microarray and RNA-sequencing technology. 2012 BHCRI Cancer Research Conference, Dalhousie University, Halifax, Nova Scotia, Canada, November 5-6, 2012.
28. *Wall, M.L. and S.M. Lewis* (2012) The role of critical arginine residues in hnRNP A1 cytoplasmic activity. New Brunswick Health Research Foundation's 4<sup>th</sup> Annual Health Research Conference, Fredericton, New Brunswick, Canada, November 7-8, 2012.
29. *Deveau, A.P., A.M. Forrester, A.J. Coombs, I.C. Chute, D. Léger, S.M. Lewis, C. Grabher, A.T. Look, and J.N. Berman* (2012) Epigenetic therapy inhibits *NUP98-HOXA9*-mediated myeloid disease – decitabine and valproic acid work synergistically to rescue normal hematopoiesis in transgenic zebrafish. 54<sup>th</sup> Annual Meeting of the American Society of Hematology, Georgia World Congress Center, Atlanta, Georgia, December 8-11, 2012.
30. *Wall, M.L. and S.M. Lewis* (2013) Methylarginine residues regulate the IRES *trans*-acting factor activity of hnRNP A1. Terry Fox Research Institute's 4th Annual Scientific Meeting, Ottawa, Ontario, Canada, May 9-11, 2013.
31. *Desnoyers, G., L.D. Gillis, and S.M. Lewis* (2013) Investigating the mechanism of eIF3e-regulated epithelial-to-mesenchymal transition. Terry Fox Research Institute's 4th Annual Scientific Meeting, Ottawa, Ontario, Canada, May 9-11, 2013.
32. *Desnoyers, G., L.D. Gillis, and S.M. Lewis* (2013) Investigating the mechanism of eIF3e-regulated epithelial-to-mesenchymal transition. EMBO Conference: Protein Synthesis and Translational Control, Heidelberg, Germany, September 8-12, 2013.
33. *Salsman, J., S. Lahsae, S. Montgomery, S. Lewis, and G. Dellaire* (2013) Application of translation state array and next-generation RNA-sequencing to interrogate PML-regulated signaling. Canadian Cancer Research Conference, Toronto, Ontario, Canada, November 3-6, 2013.
34. *Wall, M. and S. Lewis* (2014) Arginine methylation status of cytoplasmic hnRNP A1 potentially influences stress granule formation in mammalian cells. RNA Granules 2014, Halifax, Nova Scotia, Canada, June 8-10, 2014.

35. *Deveau, A., A.M. Forrester, A. Coombs, G. Wagner, C. Grabher, I. Chute, D. Leger, S. Lewis, A.T. Look, and J.N. Berman* (2014) Epigenetic therapy restores normal hematopoiesis in a zebrafish model of NUP98-HOXA9-induced myeloid disease. 11<sup>th</sup> International Conference on Zebrafish Development and Genetics, Madison, Wisconsin, June 24-28, 2014.
36. *Desnoyers, G., L. Frost, and S.M. Lewis* (2014) Investigating the mechanism of eIF3e-regulated epithelial-to-mesenchymal transition. 9<sup>th</sup> International Conference of Anticancer Research, Sithonia, Greece, October 6-10, 2014.
37. *Comeau, D., G. Desnoyers, and S.M. Lewis* (2014) Characterization of novel miRNAs involved in breast cancer metastasis. New Brunswick Health Research Foundation's 6<sup>th</sup> Annual Health Research Conference, Moncton, New Brunswick, Canada, November 13-14, 2014.
38. *Desnoyers, G., L.D. Frost, and S.M. Lewis* (2014) Decreased eIF3e expression can mediate epithelial-to-mesenchymal transition through activation of the TGF- $\beta$  signaling pathway. New Brunswick Health Research Foundation's 6<sup>th</sup> Annual Health Research Conference, Moncton, New Brunswick, Canada, November 13-14, 2014.
39. *Wall, M.L., F.K. Wong, and S.M. Lewis* (2014) HnRNP H is a novel stress granule-associated protein and assists in cellular stress recovery. New Brunswick Health Research Foundation's 6<sup>th</sup> Annual Health Research Conference, Moncton, New Brunswick, Canada, November 13-14, 2014.
40. *Deprez, P.M.L., D.A. Barnett, A.S. Culf, A. Ghosh, S.M. Lewis, G.A. Robichaud, S. Turcotte, and R.J. Ouellette* (2014) Synthetic lethality screen of tumor suppressor pathways for therapeutic compound development. New Brunswick Health Research Foundation's 6<sup>th</sup> Annual Health Research Conference, Moncton, New Brunswick, Canada, November 13-14, 2014.
41. *Deveau, A.P., A.M. Forrester, A.J. Coombs, G.S. Wagner, C. Grabher, I. Chute, D. Leger, S. Lewis, M. Mingay, M. Hirst, A.T. Look, and J.N. Berman* (2014) Preclinical determination of the efficacy of epigenetic therapy in high risk myeloid disease using the zebrafish model. 56<sup>th</sup> Annual Meeting of the American Society of Hematology, San Francisco, California, December 6-9, 2014.
42. *Ghosh, A., S. Chacko, I.C. Chute, D. Barnett, S. Fournier, M.V. Meli, S.M. Lewis, and R.J. Ouellette* (2015) Hyaluronic acid-based enrichment of extracellular vesicles: Lessons from the extracellular matrix. ISEV 2015, Washington, DC, April 23-26, 2015.

## **Presentations as a guest speaker**

1. Mutational suppressors of the temperature-sensitive ArfGAP Gcs1-28. Northeast Regional Yeast Meeting, Syracuse University, July 12-14, 2000.
2. Copy suppressors of the temperature-sensitive ArfGAP Gcs1-28. CaRE Cancer Research Symposium and 3<sup>rd</sup> Annual General Meeting, Dalhousie University, November 8, 2001.
3. A novel role for ArfGAP activity in vesicular transport. Children's Hospital of Eastern Ontario Research Institute, Ottawa, Ontario, Canada, October 15, 2003.
4. Translation-state array and its application to cancer biomarker discovery. Atlantic Omics Symposium, Moncton, New Brunswick, Canada, August 19-20, 2008.
5. Translation initiation mechanisms and cancer. 2008 Cancer Research Symposium, Dalhousie University, Halifax, Nova Scotia, Canada, November 5, 2008.
6. A novel role for the translation initiation factor eIF3e in the regulation of epithelial-to-mesenchymal transition in breast cancer: A serendipitous discovery of a gateway to cancer metastasis. New Brunswick Health Research Foundation's 3<sup>rd</sup> Annual Health Research Conference, Moncton, New Brunswick, Canada, November 8-9, 2011.
7. The serendipitous discovery of a gateway to breast cancer metastasis. Canadian Breast Cancer Foundation – Atlantic Chapter Public Research Lecture, Moncton, New Brunswick, Canada, June 11, 2012.
8. Progress towards an understanding of the cytoplasmic activities of hnRNP A1, a key protein in the control of gene expression. New Brunswick Health Research Foundation's 4<sup>th</sup> Annual Health Research Conference, Fredericton, New Brunswick, Canada, November 7-8, 2012.
9. Examining the role of protein synthesis in epithelial-to-mesenchymal transition. 2013 Beatrice Hunter Cancer Research Institute/Terry Fox Research Institute Cancer Workshop, Moncton, New Brunswick, Canada, May 27, 2013.
10. Exploring the role of the translation initiation factor eIF3e in epithelial-to-mesenchymal transition. Mount Allison University, Sackville, New Brunswick, Canada, November 22, 2013.
11. Genomic approaches in cancer research. 2014 Beatrice Hunter Cancer Research Institute/Terry Fox Research Institute Cancer Workshop, Halifax, Nova Scotia, Canada, May 26, 2014.

12. Use of a novel extracellular microvesicle capture method for the enrichment and identification of pancreatic cancer biomarkers. New Brunswick Health Research Foundation's 7th Annual Health Research Conference, Fredericton, New Brunswick, Canada, November 3-4, 2015.