

Marc PARISIEN, Ph.D.
 The Alan Edwards Centre for Research on Pain
 McGill University
 740 Penfield, room 2204
 Montréal, Québec, Canada
 H3A 0G1

phone: +1 (514) 398-2717
 email: marc.parisien@mcgill.ca

Education

Degree	Institution	Field of Study	Year
Ph.D.	University of Montréal	Computer Science	03/2010
M.Sc.	University of Montréal	Computer Science	10/2005
B.Sc.	University of Montréal	Computer Science	06/1996
Major	University of Montréal	Physics	06/1993

Work Experience

Duration	Description
06/2014 – present	Research Associate / Faculty of Dentistry McGill University / Montréal Ref: Dr. Luda Diatchenko luda.diatchenko@mcgill.ca
06/2012 – 05/2014	Postdoctoral Fellow / Biochemistry & Molecular Biology
11/2009 – 05/2012	Postdoctoral Scholar / Biochemistry & Molecular Biology University of Chicago / Chicago Ref: Dr. Tao Pan taopan@uchicago.edu Ref: Dr. Tobin Roy Sosnick trsosnic@uchicago.edu
2004 – 2009	Research Assistant / Ph.D. / RNA 3-D structure University of Montréal / Montréal Ref: Dr. François Major major@iro.umontreal.ca
2002 – 2004	Research Assistant / Protein 3-D structure University of Montréal / Montréal Ref: Dr. François Major major@iro.umontreal.ca
1997 – 2002	Analyst-Programmer / Computer-Telephony Interface Groupe Cerveau inc. / Montréal Ref: Alain Normandeau alainnormandeau@hotmail.com Ref: Michel Dionne mdionne@propulsoft.com

Contributions to Research

(A) Peer-reviewed published articles

1. Zhou KI, Parisien M, Dai Q, Liu N, Diatchenko L, Sachleben JR, Pan T. N⁶-methyladenosine modification in a long non-coding RNA hairpin predisposes its conformation to protein binding. *J Mol Biol.* **428** (2016) 822-33.
2. Gao XH, Krokowski D, Guan BJ, Bederman I, Majumder M, Parisien M, Diatchenko L, Kabil O, Willard B, Banerjee R, Wang B, Bebek G, Evans CR, Fox PL, Gerson SL, Hoppel CL, Liu M, Arvan P, Hatzoglou M. Quantitative H₂S-mediated protein sulfhydration reveals metabolic reprogramming during the integrated stress response. *eLife.* (2015) 10.7554/eLife.10067.
3. Meloto CB, Segall SK, Smith S, Parisien M, Shabalina SA, Rizzatti-Barbosa CM, Gauthier J, Tsao D, Convertino M, Piltonen MH, Slade GD, Fillingim RB, Greenspan JD, Ohrbach R, Knott C, Maixner W, Zaykin D, Dokholyan NV, Reenila I, Mannisto PT, Diatchenko L. COMT gene locus: new functional variants. *Pain.* **156** (2015) 2072-83.
4. Liu N, Qing D, Zheng G, He C, Parisien M[†], Pan T[†]. N⁶-methyladenosine-dependent RNA structural switches regulate RNA-protein interactions. *Nature.* **518** (2015) 560-4.
5. Saikia M[‡], Jobava R[‡], Parisien M[‡], Putnam A[‡], Krokowski D, Gao XH, Guan BJ, Yuan Y, Jankowsky E, Feng Z, Hu GH, Puzstai-Carey M, Gorla M, Sepuri NB, Pan T, Hatzoglou M. Angiogenin-Cleaved tRNA halves interact with cytochrome C protecting cells from apoptosis during osmotic stress. *Mol Cell Biol.* **34** (2014) 2450-63.
6. Wang X, Lu Z, Gomez A, Parisien M, Hon GC, Jia G, Ren B, Pan T, He C. m⁶A-dependent regulation of messenger RNA stability. *Nature.* **505** (2014) 117-20.
7. Parisien M[‡], Wang X[‡], Pan T. Diversity of human tRNA genes from the 1,000-genomes project. *RNA Biol.* **10** (2013) 1853-67.
8. Liu N, Parisien M, Wang X, Dai Q, Zheng G, He C, Pan T. Probing N⁶-methyladenosine RNA modification status at single nucleotide resolution in mRNA and long non-coding RNA. *RNA.* **19** (2013) 1848-56.
9. Parisien M, Wang X, Perdrizet G II, Lamphear C, Fierke CA, Maheshwari KC, Wilde MJ, Sosnick TR, Pan T. Discovering RNA-protein interactome using chemical context profiling of the RNA-protein interface. *Cell Rep.* **3** (2013) 1703-13.
10. Saikia M, Krokowski D, Guan BJ, Ivanov P, Parisien M, Hu GF, Anderson P, Pan T, Hatzoglou M. Genome-wide identification and quantitative analysis of cleaved tRNA fragments induced by cellular stress. *J Biol Chem.* **287** (2012) 42708-25.
11. Parisien M, Freed KF, Sosnick TR. On docking, scoring and assessing protein-DNA complexes in a rigid-body framework. *PLoS ONE.* **7** (2012) e32647.
12. Parisien M, Major F. Determining RNA three-dimensional structures using low-resolution data. *J Struct Biol.* **179** (2012) 252-60.
13. Parisien M[‡], Yi C[‡], Pan T. Rationalization and prediction of selective decoding of pseudouridine-modified nonsense and sense codons. *RNA.* **18** (2012) 355-67.
14. Lerman Y, Kennedy SD, Shankar N, Parisien M, Major F, Turner DH. NMR structure of a 4X4 nucleotide RNA internal loop from an R2 retrotransposon: identification of a three purine-purine sheared pair motif and comparison to MC-Sym predictions. *RNA.* **17** (2011) 1664-77.

15. Wang Z, Parisien M, Scheets K, Miller WA. The cap-binding translation initiation factor, eIF4E, binds a pseudoknot in a viral cap-independent translation element. *Structure*. **19** (2011) 868-80.
16. Yang S, Parisien M, Major F, Roux B. RNA structure determination using SAXS data. *J Phys Chem B*. **114** (2010) 10039-48.
17. Cruz-Toledo J, Dumontier M, Parisien M, Major F. RKB: a Semantic Web knowledge base for RNA. *J Biomed Sem*. **1** (2010) S2.
18. Parisien M[‡], Cruz JA[‡], Westhof E, Major F. New metrics for comparing and assessing discrepancies between RNA 3D structures and models. *RNA*. **15** (2009) 1875-1885.
19. Parisien M, Major F. The MC-Fold and MC-Sym pipeline infers RNA structure from sequence data. *Nature*. **452** (2008) 51-5. Cited 300+
20. Kim YK, Furic L, Parisien M, Major F, DesGroseillers L, Maquat LE. Stauf1 regulates diverse classes of mammalian transcripts. *EMBO J*. **26** (2007) 2670-81.
21. Parisien M, Major F. Ranking the factors that contribute to protein beta-sheet folding. *Proteins*. **68** (2007) 824-9.
22. Caron E, Cote C, Parisien M, Major F, Perreault C. Identification of two distinct intracellular localization signals in STT3-B. *Arch Biochem Biophys*. **445** (2006) 108-14.
23. Parisien M, Major F. A new catalog of protein beta-sheets. *Proteins*. **61** (2005) 545-58.
24. Parisien M, Peitsch MC, Major F. A protein conformational search space defined by secondary structure contacts. *Pac Symp Biocomput*. (1998) 425-36.

‡ Equal contribution

† Co-corresponding authors

(B) Reviews and Book Chapters

1. Koan SL, Roy J, Parisien M, Major F. Predict RNA 2D and 3D structure over the Internet using MC-Tools. *Handbook of RNA Biochemistry* (2012) Ed. Roland Hartmann.

Scholarships and Awards

Duration	Level	Agency	Level	
2012-2014	Postdoc	NSERC	National	
2009-2011	Postdoc	U of Chicago	Institutional	
2009-2011	Postdoc	NSERC	National	declined
2009-2011	Postdoc	FQRNT	Provincial	declined
2007-2009	Ph.D.	NSERC	National	
2007-2009	Ph.D.	FQRNT	Provincial	declined
1996-1997	M.Sc.	NSERC	National	

NSERC; Natural Sciences and Engineering Research Council of Canada;
Government of Canada

FQRNT; Fonds Québécois de Recherche sur la Nature et les Technologies;
Government of the province of Québec in Canada