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## EMPLOYMENTS

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**Facility Scientist, Academic Assistant III** (July 2007 – Present)  
University of Connecticut Biotechnology Center  
Scientist in Bioinformatics

**Research Assistant** (September 1997 – January 2000)  
Laval University, Infectious Diseases Research Center  
Division of Rapid Diagnostic

## EDUCATION

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University of Connecticut, Department of Molecular and Cell Biology  
**Doctoral Degree** in Genetics  
August 2001 – July 2007

Laval University, Department of Molecular and Cell Biology (Medicine)  
**Masters Degree** in Molecular and Cell Biology  
January 2000 – March 2002

Laval University, Biochemistry Department  
**Certificate Degree** in Genetic Engineering  
September 1996 – May 1997

Laval University, Biology Department  
**Bachelor Degree** in Biology, Major in Molecular Biology  
September 1993 – May 1996

## TEACHING EXPERIENCES

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### University of Connecticut

- Teaching Assistant for MCB 200 (Human Genetics) – Fall 2002 and Spring 2007
- Teaching Assistant for MCB 371 (Computer Methods in Molecular Evolution) – Spring 2006

- Teaching Assistant for MCB 221 (Intro. to Mol. Evol. and Bioinformatics) – Fall 2005
- Lecturer for a three weeks class in Bioinformatics and Functional Genomics: Computer Approaches to Sequence Analysis (Summer 2004)
- Taught two lectures on “Introduction to Genetics” for STA 401 (Bioinformatics) for non-biologists – Spring 2003
- Teaching Assistant for BIO 107 (The Biology of Human Health and Diseases) – Spring 2001

#### AWARDS

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- Selected as participant for the 2007 ASM Kadner Institute
- NASA Planetary Biology Internship Recipient, Summer 2004
- Student Travel Grant Award, 101st ASM General Meeting, Orlando, FL, May 2001
- First place winner, student science contest for works on composite concretes. March 1995, St-Felicien, Quebec, Canada

#### SPECIAL SKILLS

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- Highly proficient in PERL, developing scripts for automated labor intensive genomic research tasks and data mining, knowledge of SQL, R and BioPerl
- Proficient in Unix, PC and MAC operating system
- Experience with NextGen data analysis (Illumina, 454)
- Webmaster for the MCB departmental web site (2004 – 2006)

#### PUBLICATIONS

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Williams D, Gogarten JP, **Lapierre P.**: Filling the gaps in the genomic landscape. *Genome Biol.* 2010;11(2):103. Epub 2010 Feb 16.

Bickhart DM, Gogarten JP, **Lapierre P**, Tisa LS, Normand P, Benson DR. : Insertion sequence content reflects genome plasticity in strains of the root nodule actinobacterium *Frankia*. *BMC Genomics.* 2009 Oct 12;10(1):468

Bajrami B, Shi Y, **Lapierre P**, Yao X. : Shifting unoccupied spectral space in mass spectrum of peptide fragment ions. *J Am Soc Mass Spectrom.* 2009 Nov;20(11):2124-34

Zhaxybayeva O, Swithers KS, **Lapierre P**, Fournier GP, Bickhart DM, DeBoy RT, Nelson KE, Nesbø CL, Doolittle WF, Gogarten JP, Noll KM.: On the chimeric nature, thermophilic origin, and phylogenetic placement of the Thermotogales. *Proc Natl Acad Sci U S A.* 2009 Apr 7;106(14):5865-70.

**Lapierre P**, Gogarten JP. Estimating the size of the bacterial pan-genome.: *Trends Genet.* 2009 Mar;25(3):107-10.

**Lapierre P.**: Dynamics of Prokaryotic Genome Evolution. Book chapter in “Computational Methods for Understanding Bacterial and Archaeal Genomes”, Xu Y, Gogarten JP (eds.), Imperial College Press, London,

2008.

Noll KM, **Lapierre P**, Gogarten JP, Nanavati DM.: Evolution of mal ABC transporter operons in the Thermococcales and Thermotogales. BMC Evol Biol. 2008 Jan 15;8:7

Philippe Normand, **Pascal Lapierre**, Louis S. Tisa, J. Peter Gogarten, Nicole Alloisio, Emilie Bagnarol, Carla A. Bassi, Alison M. Berry, Derek M. Bickhart, Nathalie Choisne, Arnaud Couloux, Benoit Cournoyer, Stephane Cruveiller, Vincent Daubin, Nadia Demange, M. Pilar Francino, Eugene Goltsman, Ying Huang, Olga R. Kopp, Laurent Labarre, Alla Lapidus, Celine Lavire, Joelle Marechal, Michele Martinez, Juliana E. Mastrorunzio, Beth C. Mullin, James Niemann, Pierre Pujic, Tania Rawnsley, Zoe Rouy, Chantal Schenowitz, Anita Sellstedt, Fernando Tavares, Jeffrey P. Tomkins, David Vallenet, Claudio Valverde, Luis G. Wall, Ying Wang, Claudine Medigue, & David R. Benson : Genome characteristics of facultatively symbiotic *Frankia* sp. strains reflect host range and host plant biogeography. Genome Research, 2007 Jan;17(1):7-15.

**Lapierre, P.**\*, Shial, R.\*, and Gogarten, J.P. : Distribution of F- and A/V- type ATPases in *Thermus scotoductus* and Other Closely Related Species. Systematic and Applied Microbiology, 2006 Jan;29(1):15-23. \*Have contributed equally to this work

Olga Zhaxybayeva, **Pascal Lapierre** and J. Peter Gogarten : Ancient Gene Duplications and the Root(s) of the Tree of Life. Protoplasma, 2005 Dec;227(1):53-64.

Olga Zhaxybayeva, **Pascal Lapierre** and J. Peter Gogarten. Genome mosaicism and organismal lineages. Trends in Genetics 2004 May;20(5):254-60.

**Pascal Lapierre**, Ann Huletsky, François J. Picard, Michel G. Bergeron. Real-time PCR assay for detection of fluoroquinolone resistance associated with *grlA* mutations in *Staphylococcus aureus*. Journal of Clinical Microbiology, 2003 Jul; 41(7): 3246-51.

Fournier D, Mouton C, **Lapierre P**, Kato T, Okuda K, Menard C. *Porphyromonas gulae* sp. nov., an anaerobic, gram-negative coccobacillus from the gingival sulcus of various animal hosts. Int. J. Syst. Evol. Microbiol. 2001 May;51(Pt 3):1179-89.