



René L Warren

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I am a scientist with 20+ years experience in biotechnology, genomics, bioinformatics

Played key role in bioinformatics analysis of *Rhodococcus*, *Cryptococcus*, Bullfrog, Spruce genomes

Developed the first software for *de novo* genome assembly with emerging short DNA sequences

Discovered *Fusobacterium* in colon cancer, one of *Time Magazine's* 2011 top ten breakthrough

seeking new challenges and additional leadership

PROFESSIONAL EXPERIENCE

2017 – now

Group Leader

BC Cancer Agency – Genome Sciences Centre, Vancouver

- Provide group and projects leadership, expertise, guidance
- Interview, supervise, mentor COOP students and staff
- Conceptualize / led development of genome analysis technologies
- Write research proposals and scientific articles

2002 – 17

Coordinator

BC Cancer Agency – Genome Sciences Centre, Vancouver

- Lead bioinformatics software R&D (Python, PERL, R, unix)
- Published research (scientific journals, international conferences)
- Supervised biologists and programmers
- Interviewed job candidates, taught and trained employees

2000 – 01

Officer

NRC – CNRC – Biotechnology Research Institute, Montréal

- Engineered gene expression regulation technology (molec/cell biology)
- Designed, fabricated, tested components of the DNA “gene switch”
- Collaborated with stakeholders, chemists, molecular and cell biologists

EDUCATION

- 2000 – 01 **Certificate Computer Science** | Concordia University
- 1997 – 99 **MSc Biochemistry & Molecular Biology** | UBC
- 1994 – 97 **BSc Biochemistry** *Dean's Honours List* | Université de Montréal

ADDITIONAL INFORMATION

- 2015, 16 Recipient of the *John Jambor Knowledge Fund* travel award
- 2011 Interviewed by *NTN24* channel for *Fusobacterium* discovery colon cancer
- 2009 Interviewed by *Genome Technology* to discuss next-generation sequencing
- 2007 Interviewed by *GenomeWeb* for the development of *SSAKE*
- 1998 UBC Graduate Fellowship awarded for MSc
- 1997 *Fonds de la Recherche en Santé Québec* (FRSQ) awarded for BSc
- 1996 Bursary from FRSQ for BSc honour's research project
- 1995 Worked at NASA to coordinate the crystallization of proteins under microgravity : CMIX-4 payload, space shuttle *Endeavour*

PRESENTATIONS

(selected from 16)

- 2017, 18 Research in Computational Molecular Biology, Hong Kong / Paris – **talks**
- 2015, 16 Intelligent Systems for Molecular Biology, Dublin UK / Orlando USA– **talks**
- 2008, 12, 15 Pacific Symposium on Biocomputing, Kona, Hawaii USA – **posters**
- 2010 Sequencing, Finishing and Analysis in the Future, Santa Fe USA – **talk**
- 2007 Synthetic Biology 3.0 conference, Zürich, Switzerland – **talk**

PUBLICATIONS

(selected from 58 *co-first authors)

- Warren RL.** (2018) Visualizing genome synteny with xmatchview. *Journal of Open Source Software*. 3:497
- Warren RL, et al.** (2015) LINKS: Scalable, alignment-free scaffolding of draft genomes with long reads. *GigaScience* 4:35
- Warren RL, et al.** (2012) Derivation of HLA types from shotgun sequence datasets. *Genome Med.* 4:95
- Castellarin M*, **Warren RL***, et al. (2012) *Fusobacterium nucleatum* infection is prevalent in human colorectal carcinoma. *Genome Research*. 22:299-306
- Warren RL, et al.** (2007) Assembling millions of short DNA sequences using SSAKE. *Bioinformatics*. 23:500
- E Allen-Vercoe, R Holt, R Moore, **R Warren**. Detection of fusobacterium in a gastrointestinal sample to diagnose gastrointestinal cancer. US Patent App. 13/877,421 / WO Patent 2,012,045,150

REFERENCES

Available upon request