

# René



# Warren

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<http://renewarren.ca>

**20+ years experience in biotechnology, genomics, informatics**

Developed the first *de novo* genome assembly software (*SSAKE*) with short DNA sequences

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

Coordinated bioinformatics analyses of *Rhodococcus*, *Cryptococcus*, Bullfrog, Spruce genomes

**I am seeking new challenges & additional leadership**

## EXPERIENCE

2017 – now

### ***Group Leader***

***BC Cancer Agency – Genome Sciences Centre, Vancouver***

- Lead group, provide project management, expertise, guidance
- Conceptualize / lead the development of genome analysis technologies
- Interview, supervise, mentor COOP students and staff

2002 – 17

### ***Coordinator***

***BC Cancer Agency – Genome Sciences Centre, Vancouver***

- Lead bioinformatics R&D (Python, PERL, R, MySQL, HTML/CSS/js, unix/mac/win.)  
Software dev.: *SAM, SSAKE, TASR, HLAMiner, LINKS, XMatchView, PASS, RAILS, ARCS*
- Published research (scientific journals, international conferences)
- Interviewed, taught, trained, supervised biologists and programmers

2000 – 01

### ***Officer***

***NRC – CNRC – Biotechnology Research Institute, Montréal***

- Engineered gene expression regulation technology (molecular / cell biology)
- Designed, fabricated, tested components of 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**

## ACCOLADES

- 2015, 16    Awarded the *John Jambor Knowledge Fund* for presenting at conferences
- 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        Awarded the UBC Graduate Fellowship for MSc studies
- 1997        Awarded *Fonds de la Recherche en Santé Québec* (FRSQ) for BSc studies
- 1996        Awarded Bursary from FRSQ for BSc honour's research project
- 1995        Worked at NASA : coordinate protein crystallization under microgravity  
              U.S. space shuttle *Endeavour*, CMIX-4 payload

## PRESENTATIONS

*Selected from 16 lead author*

- 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 peer-reviewed [22 lead author], \*co-first authors*

- Warren RL**. 2018. Visualizing genome synteny with xmatchview. *J. Open Source Software*. 3:497
- Warren RL**, *et al.* 2015. LINKS: Scalable scaffolding of 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* in colorectal carcinoma. *Genome Res.* 22:299
- Warren RL**, *et al.* 2007. Assembling millions of short DNA sequences using SSAKE. *Bioinfo.* 23:500

## REFERENCES

*Available upon request*