

# 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 – 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 – Genome Sciences Centre***, Vancouver

- Lead bioinformatics R&D (Python, PERL, R, MySQL, HTML/CSS/js, unix/mac/win.)  
Software : *SAM*, *SSAKE*, *TASR*, *HLAminer*, *LINKS*, *XMatchView*, *PASS*, *RAILS*, *ARCS*, *ntEdit*
- 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	<b>Certificate</b> Computer Science	<b>Concordia University</b>
1997 – 99	<b>MSc</b> Biochemistry & Molecular Biology	<b>UBC</b>
1994 – 97	<b>BSc</b> Biochemistry ( <i>Dean's Honours List</i> )	<b>Université de Montréal</b>

## ACCOLADES

2015, 16	Awarded the <i>John Jambor Knowledge Fund</i> for presenting at conferences
2011	Interviewed by <i>NTN24</i> channel for <i>Fusobacterium</i> discovery colon cancer
2009	Interviewed by <i>Genome Technology</i> to discuss next-generation sequencing
2007	Interviewed by <i>GenomeWeb</i> for the development of <i>SSAKE</i>
1998	Awarded the UBC Graduate Fellowship for MSc studies
1997	Awarded <i>Fonds de la Recherche en Santé Québec</i> (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 <i>Endeavour</i> , CMIX-4 payload

## PRESENTATIONS

*Selected from 17 lead author*

2017, 18	Research in Computational Molecular Biology, Hong Kong / Paris	<b>talks</b>
2015, 16, 19	Intelligent Systems for Molecular Biology, Dublin / Orlando / Basel	<b>talks</b>
2008, 12, 15	Pacific Symposium on Biocomputing, Kona, Hawaii USA	<b>posters</b>
2010	Sequencing, Finishing and Analysis in the Future, Santa Fe USA	<b>talk</b>
2007	Synthetic Biology 3.0 conference, Zürich, Switzerland	<b>talk</b>

## PUBLICATIONS

*Selected from 61 peer-reviewed [23 lead author], \*co-first authors*

**Warren RL, et al.** 2019. ntEdit: scalable genome sequence polishing. *Bioinformatics*. TBD  
doi:10.1093/bioinformatics/btz400

**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*