# René



# Warren

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http://renewarren.ca

#### 20+ yrs 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 *Rhodococus*, *Cryptococcus*, Bullfrog, Spruce genomes

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

#### PROFESSIONAL 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.)
   Technologies 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

# **ADDITIONAL INFORMATION**

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 to coordinate the crystallization of proteins under microgravity: CMIX-4 payload, space shuttle <i>Endeavour</i>

## **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 po	osters
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]

Warren RL. 2018. Visualizing genome synteny with xmatchview. J. 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 \*co-first authors

Warren RL, et al. 2007. Assembling millions of short DNA sequences using SSAKE. Bioinfo. 23:500

#### **REFERENCES**

Available upon request