



René L Warren

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About me

I am a researcher with over 20 years experience in biotechnology, genomics and informatics

I have played a central role in managing the bioinformatics of large international collaborations to decrypt the genomes of *Rhodococcus*, *Cryptococcus*, Bullfrog and Spruce

I developed the first program for genome assembly with then emerging short DNA sequences and pioneered the development of technologies that enabled the discovery of *Fusobacterium* in colon cancer, one of *Time Magazine's* top ten medical breakthrough of 2011

I currently lead the BC Genome Sciences Centre's bioinformatics technology lab
In that role, I have conceptualized/led the development of genome scaffolders for long read data

I am eager to take on additional challenges and leadership

PROFESSIONAL EXPERIENCE

Feb 2017 –
Present

Group Leader

BC Cancer Agency – Genome Sciences Centre, Vancouver BC

- Provide project leadership, expertise, guidance
- Plan / coordinate group activities
- Supervise / mentor biologists and programmers
- Conceptualize development of bioinformatics technologies
- Write research proposals
- Interview candidates / teach and train personnel

Jan 2002 –
Jan 2017

Coordinator

BC Cancer Agency – Genome Sciences Centre, Vancouver BC

- Lead bioinformatics software R&D
- Published research in reputed journals / international conferences
- Developed marketing (web portals / news release)
- Supervised a team of biologists and programmers
- Interviewed job candidates, taught and trained employees

Jan 2000 –
Dec 2001

Officer

National Research Council - Biotechnology Research Institute, Montreal QC

- Co-engineered a system for regulating gene expression in cells
- Designed, fabricated and tested components of the DNA “gene switch”
- Work led to a patent, technology sold to company
- Integrated technology in viral and cell systems

EDUCATION

- Sep 2005 – Jun 2006 **Management Courses**
Provincial Health Services Authority, Vancouver, Canada
- Sep 2000 – Dec 2001 **Cert. Computer Science**
Concordia University, Montréal, Canada
- Jun 1997 – Aug 1999 **MSc Biochemistry & Molecular Biology**
University of British Columbia, Vancouver, Canada
- Sep 1994 – May 1997 **BSc Biochemistry** Dean's Honours List
Université de Montréal, Montréal, Canada

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 15)

- 2017 Research in Computational Molecular Biology, Hong Kong – **talk**
- 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 50)

*co-first authors

- Yeo S*, Coombe L*, Chu J, **Warren RL***, Birol I. (2017) ARCS: Assembly Roundup by Chromium Scaffolding. TBD
- Coombe L*, **Warren RL***, et al. (2016) Assembly of the complete Sitka spruce chloroplast genome using 10X Genomics' GemCode sequencing data. *PLoS ONE*. 11(9): e0163059
- 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