

## Peer-Reviewed Publications

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\*Authors contributed equally

	All	Since 2019
Citations	13534	6736
h-index	43	35
i10-index	76	66

108. **René L Warren**, Lauren Coombe, Johnathan Wong, Parham Kazemi, Inanc Birol. 2024. Human ancestry inference at scale, from genomic data bioRxiv 2024.03.26.586646; doi: <https://doi.org/10.1101/2024.03.26.586646>
107. Lauren Coombe, Parham Kazemi, Johnathan Wong, Inanc Birol, **René L. Warren**. 2024. Multi-genome synteny detection using minimizer graph mappings bioRxiv 2024.02.07.579356; doi: <https://doi.org/10.1101/2024.02.07.579356>
106. Chenkai Li, Darcy Sutherland, Ali Salehi, Amelia Richter, Diana Lin, Sambina Islam Aninta, Hossein Ebrahimikondori, Anat Yanai, Lauren Coombe, **René L. Warren**, Monica Kotkoff, Linda M.N. Hoang, Caren C. Helbing, Inanc Birol. 2024. Mining the UniProtKB/Swiss-Prot database for antimicrobial peptides bioRxiv 2024.05.24.595811; doi: <https://doi.org/10.1101/2024.05.24.595811>
105. Ali Salehi, Anat Yanai, Amelia Richter, Chenkai Li, Darcy Sutherland, Lauren Coombe, Monica Kotkoff, **René L. Warren**, Linda M.N. Hoang, Inanc Birol. Antimicrobial Peptides with High Bioactivity Against MDR Isolates: Addressing Public Health Concerns. *Submitted to Journal of Infectious Diseases*
104. Langlois, Valerie; Lopez, M. Louie; Allison , Michael ; Imbery, Jacob; Couillard, Julie; Acharya-Patel, Neha; Bergman, Lauren; Bonderud, Matthew; Brochu, Marie-Pier; Castonguay, Marie-Lee; Coombe, Lauren; Dema, Anna; Groenwold, Emma; Lee, Hajeong; Ma, Isabel; Ren, Yilin; Knowles, Graeme; Sandre, Fidji; To, Tuan Anh; **Warren, Rene**; Yang, Cecilia; Birol, Inanc; Helbing, Caren. Roadmap for the Application of Environmental DNA (eDNA) Standards for Surveying 117 Taxa using Quantitative Polymerase Chain Reaction-Based Assays. Submitted to Environmental DNA
103. Lopez, Mark Louie; Yang, Cecilia; Coombe, Lauren; **Warren, Rene**; Allison, Michael; Imbery, Jacob; Birol, Inanc; Helbing, Caren. mtGrasp: Streamlined mitochondrial genome reference-grade assembly and standardization to enhance mitogenome resources and improve the development of environmental DNA assays. Submitted to Methods in Ecology and Evolution
102. Li C, Sutherland D, Richter A, Coombe L, Yanai A, **Warren RL**, Kotkoff M, Hof F, Hoang LMN, Helbing C, Birol I. 2024. De novo synthetic antimicrobial peptide design with a recurrent neural network. Protein Science. <https://doi.org/10.1002/pro.5088>

101. Ebrahimikondori H, Sutherland D, Yanai A, Richter A, Salehi A, Li C, Coombe L, Kotkoff M, **Warren RL**, Birol I. 2024. Structure-aware deep learning model for peptide toxicity prediction. *Protein Science*. <https://doi.org/10.1002/pro.5076>
100. Acharya-Patel N, Groenwold E, Lemay MA, Clemente-Carvalho R, Morien E, Dudas S, Rubidge E, Yang CL, Coombe L, **Warren RL**, Frid A, Birol I, Helbing CC. 2024. Comparison of environmental DNA and SCUBA diving methods to survey keystone rockfish species on the Central Coast of British Columbia, Canada. *Ecol. Indic.* 160, 111830. <https://doi.org/10.1016/j.ecolind.2024.111830>
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## Patents

3. BIROL, Inanc; LIN, Diana; **WARREN, René, Louis**; SUTHERLAND, Darcy; LI, Chenkai; HOANG, Linda; YANAI, Anat; EBRAHIMIKONDORI, Hossein; RICHTER, Amelia; HELBING, Caren, C; HOF, Fraser. WIPO (PCT) Patent Appln No. CA2024/050914, ANTIMICROBIAL PEPTIDES
- 2 BIROL, Inanc, LIN, Diana, **WARREN, René, Louis**, SUTHERLAND, Darcy, LI, Chenkai, HOANG, Linda, YANAI, Anat, FRASER, Erin - U.S. Patent Application No. 63/487,920 filed March 2, 2023, and in PCT Patent Application No. PCT/CA2023/050941 filed July 13, 2023. Antimicrobial Peptides.
1. E Allen-Vercoe, R Holt, R Moore, **R Warren** - US Patent App. 13/877,421, 2011. Detection of fusobacterium in a gastrointestinal sample to diagnose gastrointestinal cancer.

## First-Author Conference Presentations

20. Pacific Symposium on Biocomputing, Kona, Hawaii, USA. January 2025. (Poster: **ntRoot: Human ancestry inference at scale from genomic data**)
19. 27<sup>th</sup> Annual International Conference on Research in Computational Molecular Biology (RECOMB), Istanbul, Turkey, April 2023 (Poster: **Unique region identification in genomes using a k-mer approach**)
18. 29<sup>th</sup> Intelligent Systems for Molecular Biology (ISMB), Virtual/online. July 2021 (Speed talk : **SARS-CoV-2 variant timemaps**)
17. 27<sup>th</sup> Intelligent Systems for Molecular Biology (ISMB), Basel, Switzerland. July 2019 (Poster: **ntEdit: ultra fast, scalable genome sequence polishing**)
16. 22<sup>nd</sup> Annual International Conference on Research in Computational Molecular Biology (RECOMB), Paris, France, April 2018 (Poster: **Chromosome-scale scaffolding human genomes with linked read k-mers**)
15. 21<sup>st</sup> Annual International Conference on Research in Computational Molecular Biology (RECOMB), Hong Kong, May 2017 (Selected talk: **ARCS: Genome scaffolding with linked reads**)
14. American Society of Human Genetics (ASHG), Vancouver, Canada, October 2016 (Poster: **HLAminer v2 : HLA predictions by targeted assembly with ABySS**)
13. 24<sup>th</sup> Intelligent Systems for Molecular Biology (ISMB), Orlando, Florida, USA. July 2016 (Invited talk – highlights track : **A scalable genome assembly toolkit**)
12. 23<sup>rd</sup> Intelligent Systems for Molecular Biology (ISMB), Dublin, Ireland. July 2015 (Invited talk – late breaking research track. Selected talk - HiTSeq): **LINKS: Scaffolding genome assemblies with nanopore reads**
11. Student Biotechnology Network, Vancouver, Canada. February 2015 (Invited talk: **My bioinformatics career journey**)
10. Pacific Symposium on Biocomputing, Kona, Hawaii, USA. January 2015 (Poster: **High-performance computing for assembly and analysis of big genomics data**)
9. Pacific Symposium on Biocomputing, Kona, Hawaii, USA. January 2012 (Poster: **HLAminer: Derivation of HLA types from shotgun sequence datasets**)
8. Sequencing, Finishing and Analysis in the Future, Santa Fe, New Mexico, USA. June 2010 (Invited Talk: **Sequencing human IgH from H. mole**)
7. Advances in Genome Biology and Technology, Marco Island, Florida, USA. February

2009 (Posters: **SSAKE v3.2.1** and **T Cell Receptor Sequencing**)

6. Pacific Symposium on Biocomputing, Kona, Hawaii, USA. January 2008 (Poster: **SSAKE v3.0**)
5. Synthetic Biology 3.0 conference, Zurich, Switzerland. June 2007 (Invited talk: ***H. influenzae* genome reconstruction in *E. coli***)
4. 5th CSHL/Wellcome Trust Genome Informatics meeting. Cold Spring Harbor, New-York, USA. October 2005 (Poster: **Physical map-assisted whole-genome shotgun sequence assemblies**)
3. 7th Annual Conference on Computational Genomics. Reston, Virginia, USA. October 2004 (Poster: ***Rhodococcus sp. RHA1* whole genome sequencing**)
2. Genomes 2004: International Conference on Microbial Genomes analysis. Hinxton, UK. April 2004 (Poster: ***Rhodococcus sp. RHA1* whole genome sequencing**)
1. 3rd CSHL/Wellcome Trust Genome Informatics meeting. Cold Spring Harbor, New-York, USA. May 2003 (Poster: **Sequence Assembly Manager**)