



BIOGRAPHICAL SKETCH: C. TITUS BROWN

A. PROFESSIONAL PREPARATION

Reed College	Math	B.A.	1997
California Institute of Technology	Biology	Ph.D.	2007
California Institute of Technology	Biology	Postdoc.	2007-2008

B. APPOINTMENTS

May 2008-Present Assistant Professor, Computer Science & Egr / Microbiology and Molecular Genetics, MSU

C. PUBLICATIONS

PUBLICATIONS MOST CLOSELY RELATED TO THE PROJECT

1. *The genome and developmental transcriptome of the strongylid nematode Haemonchus contortus*. Schwarz EM, Korhonen PK, Campbell BE, Young ND, Jex AR, Jabbar A, Hall RS, Mondal A, Howe AC, Pell J, Hofmann A, Boag PR, Zhu XQ, Gregory TR, Loukas A, Williams BA, Antoshechkin I, Brown CT, Sternberg PW, Gasser RB. *Genome Biol.* 2013 Aug 28;14(8):R89.
2. *Draft Genome Sequences of Two Campylobacter jejuni Clinical Isolates, NW and D2600*. Jerome JP, Klahn BD, Bell JA, Barrick JE, Brown CT, Mansfield LS. **J Bacteriol.** 2012 Oct; 194(20):5707-8.
3. *Scaling metagenome sequence assembly with probabilistic de Bruijn graphs*. Pell J, Hintze A, Canino-Koning R, Howe A, Tiedje JM, Brown CT. **Proc Natl Acad Sci USA**, Published online before print July 30, 2012, doi: 10.1073/pnas.1121464109.
4. *Standing Genetic Variation in Contingency Loci Drives the Rapid Adaptation of Campylobacter jejuni to a Novel Host*. Jerome JP, Bell JA, Plovianich-Jones AE, Barrick JE, Brown CT, Mansfield LS. **PLoS One**, 2011 Jan 24;6(1):e16399..
5. *Direct capture and metagenomic analysis of microbial partnerships mediating the anaerobic oxidation of methane*. A. Pernthaler, A.E. Dekas, C.T. Brown, S. Goffredi, A.E. Dekas, T. Embaye, and V.J. Orphan. **Proc Natl Acad Sci** 2008 May 13;105(19):7052-7.

OTHER SIGNIFICANT PUBLICATION

1. *Sequencing of the sea lamprey (Petromyzon marinus) genome provides insights into vertebrate evolution*. Smith, J. et al, (Lamprey Sequencing Consortium). Published online Feb 2, 2013, **Nature Genetics**.
2. *Standing Genetic Variation in Contingency Loci Drives the Rapid Adaptation of Campylobacter jejuni to a Novel Host*. Jerome JP, Bell JA, Plovianich-Jones AE, Barrick JE, Brown CT, Mansfield LS. **PLoS One**, 2011 Jan 24;6(1):e16399.
3. *The Genome of the Sea Urchin Strongylocentrotus purpuratus*. The S. purpuratus Genome Consortium. **Science**. 2006 Nov 10;314(5801):941-52.
4. *Paircomp, FamilyRelationsII and Cartwheel: Tools for Interspecific Sequence Comparison*. C. T. Brown (corresponding author), Y. Xie, E.H. Davidson, R.A. Cameron. **BMC Bioinformatics**. 2005 Mar 24;6(1):70.
5. *Evolutionary comparisons suggest many novel cAMP response protein binding sites in Escherichia coli*. Brown CT, Callan CG Jr. **Proc Natl Acad Sci USA**. 2004 Feb 24;101(8):2404-9.

D. SYNERGISTIC ACTIVITIES

Organizer, Cloud Computing workshop at Plant & Animal Genome XX, Jan 2012.

Director, two-week intensive workshop in Analyzing Next-Generation Sequencing Data, 2010-present

TA and Lecturer MBL Embryology course, summer 2006, 2007, and 2008.

Led and participated in several bioinformatics toolkit projects, including Cartwheel (comparative sequence analysis), motility (motif finding), and pygr (graph database for bioinformatics).

Regular lecturer on open source testing methodologies, and author of professional book on Web testing technologies.

E. COLLABORATORS AND OTHER AFFILIATIONS

COLLABORATORS AND CO-EDITORS

J. Barrick (UT Austin), J. Bell (MSU), S. Goffredi (Caltech), C. Lee (UCLA), L. Mansfield (MSU), P.W. Sternberg (Caltech), B.J. Swalla (UW), J.M. Tiedje (MSU), S.G. Tringe (JGI), J.Jansson (JGI).

GRADUATE ADVISORS AND POSTDOCTORAL SPONSORS

Graduate: Eric H. Davidson (Caltech); **Postdoctoral:** Marianne Bronner (Caltech)

THESIS ADVISOR AND POSTGRADUATE SPONSOR (Total of 9)

Jiarong Guo (MSU, 2011; PhD student, current), Arend Hintze (MSU postdoc, 2010-2011), Adina Howe (MSU postdoc, current), Elijah Lowe (MSU PhD student, current), Kanchan Pavangadkar (MSU postdoc, current), Jason Pell (MSU PhD student, current), Likit Preeyanon (MSU PhD student, current), Qingpeng Zhang (MSU PhD student, current), Chris Welcher (MSU student, current).