

ORNL–University Partnerships in Computational Biology

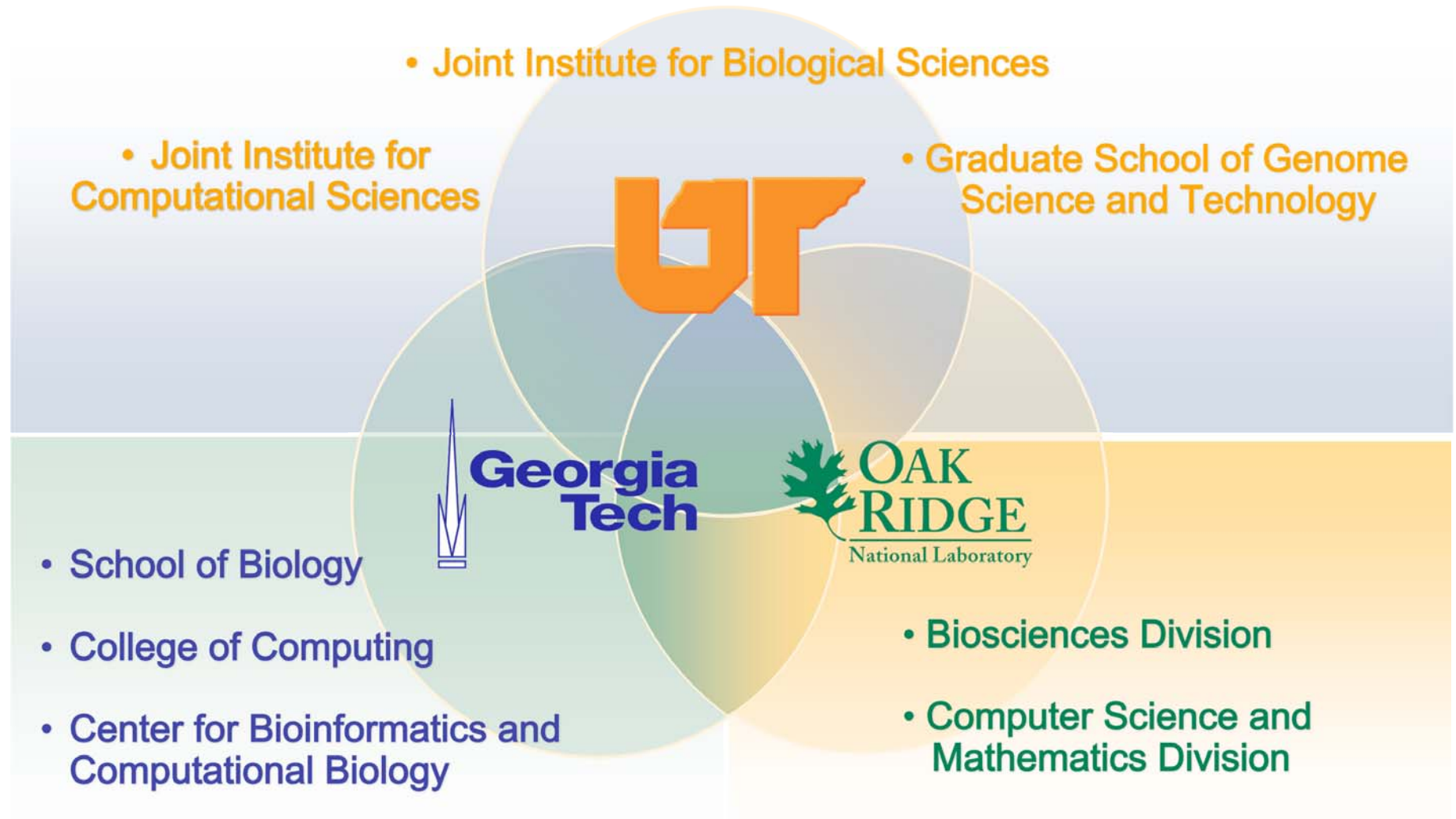
Presented by

Igor B. Jouline (Zhulin)

Joint Institute for Computational Sciences
The University of Tennessee–Oak Ridge National Laboratory



ORNL-University partnerships in computational biology



ORNL-UT Graduate School of Genome Science and Technology

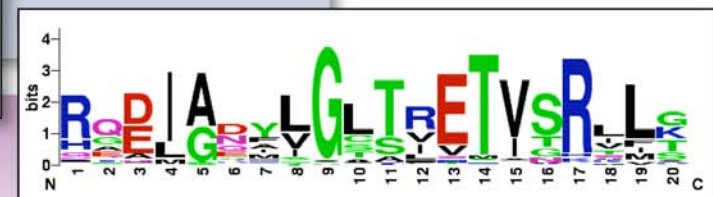
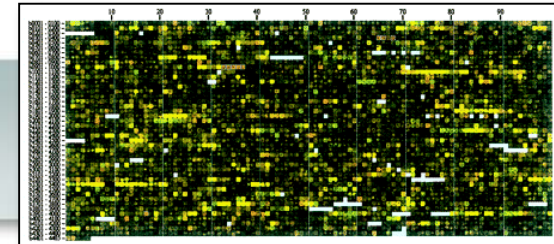
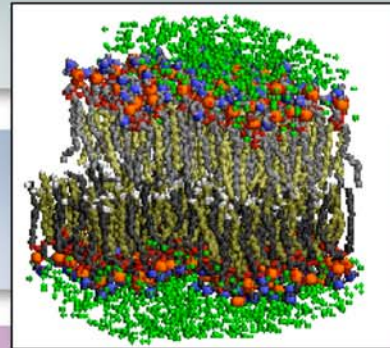


Areas of research and education:

Genetics and genomics

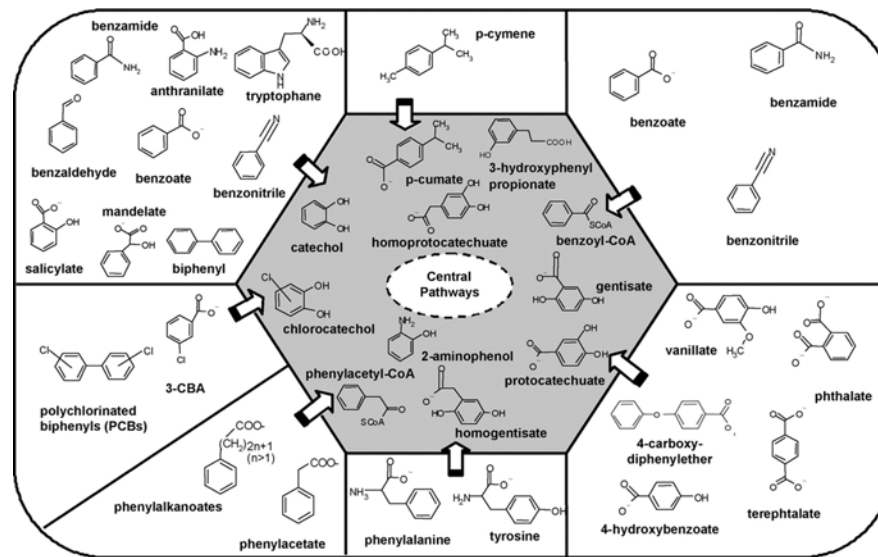
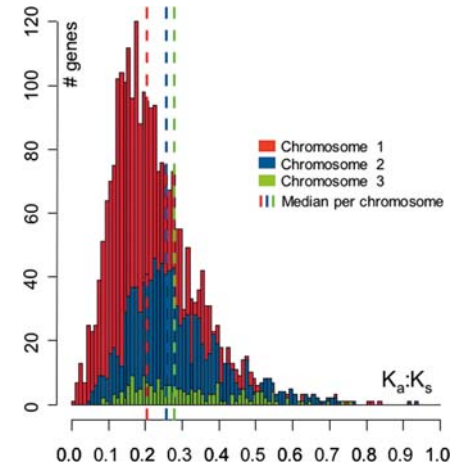
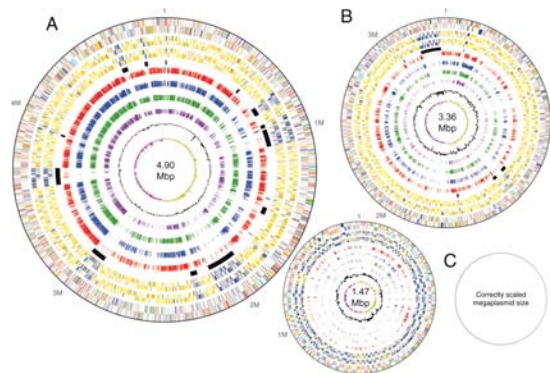
Structural biology and proteomics

Computational biology and bioinformatics



<http://gst.ornl.gov>

Novel microbial genome reveals extraordinary metabolic versatility



P. S. G. Chain, et al. (2006) *Proc. Natl. Acad. Sci. USA* 103: 15280-15287



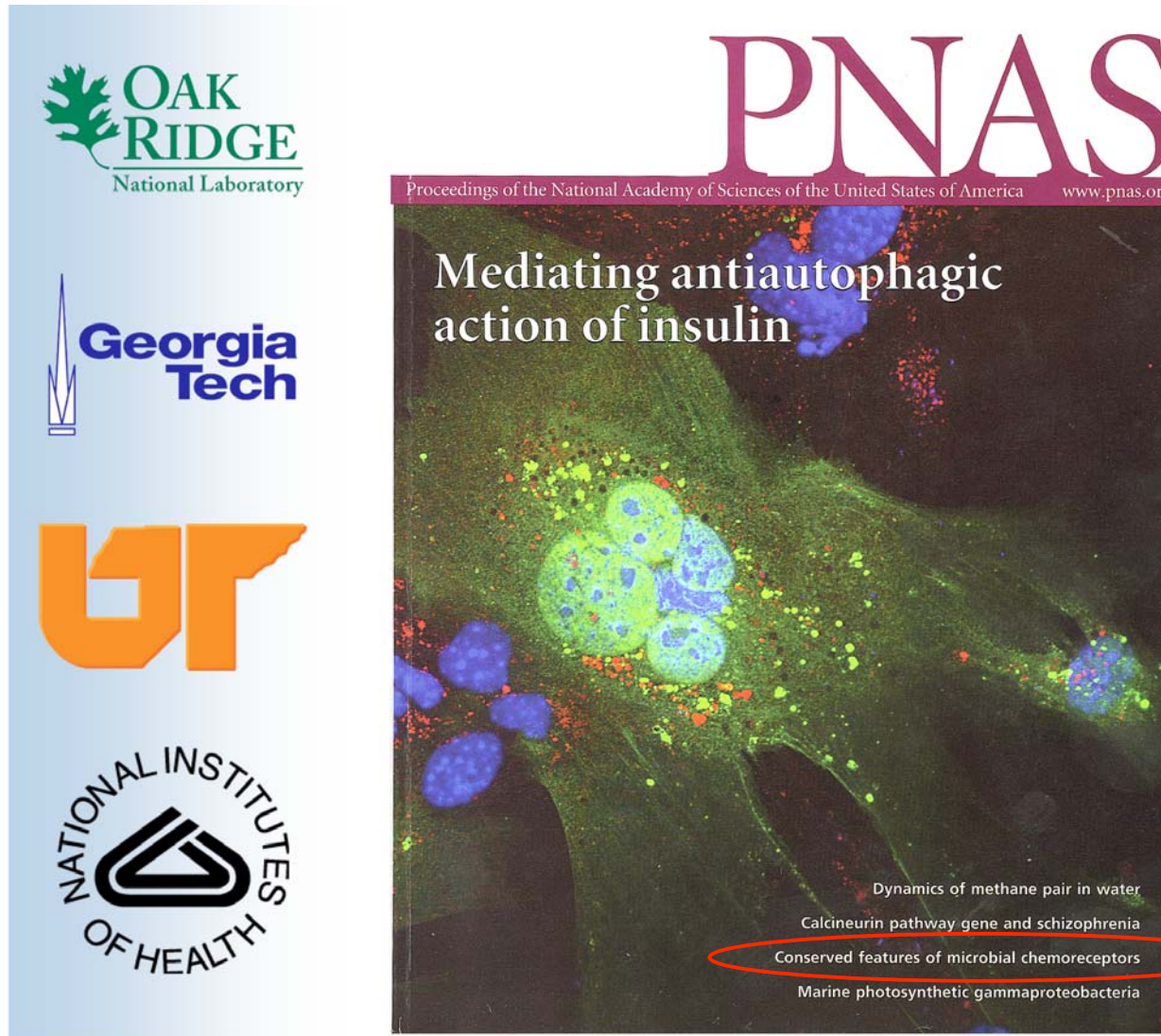
MiST: Microbial Signal Transduction Database



A screenshot of the Microbial Signal Transduction Database website as seen in a Windows Internet Explorer browser. The browser address bar shows 'http://genomics.ornl.gov/mist/'. The page title is 'Microbial Signal Transduction Database'. The main content area has a black header with the title in white. Below the header, there are sections for 'What is MiST?', 'How do I cite MiST?', 'Definitions of microbial signal transduction implemented in MiST are described in:', 'How do I use MiST?', 'Need some help?', and 'Comments? Suggestions?'. A red circle highlights a citation in the 'How do I cite MiST?' section: 'MIST: a microbial signal transduction database. Luke E. Ulrich and Igor B. Zhulin. Nucleic Acids Research, 2007, 35:D386-D390.' A red line connects this citation to a red-bordered box on the right containing the text 'Featured in FACULTY OF 1000'. At the bottom right of the page, there is a copyright notice: 'Copyright © 2006 - Luke Ulrich Security notice'. At the bottom center of the slide, the citation is repeated: 'L. E. Ulrich and I. B. Zhulin (2007) Nucleic Acids Res. 35: D386-D390'.

<http://genomics.ornl.gov/mist>

New computational study reveals novel conserved features in chemoreceptors

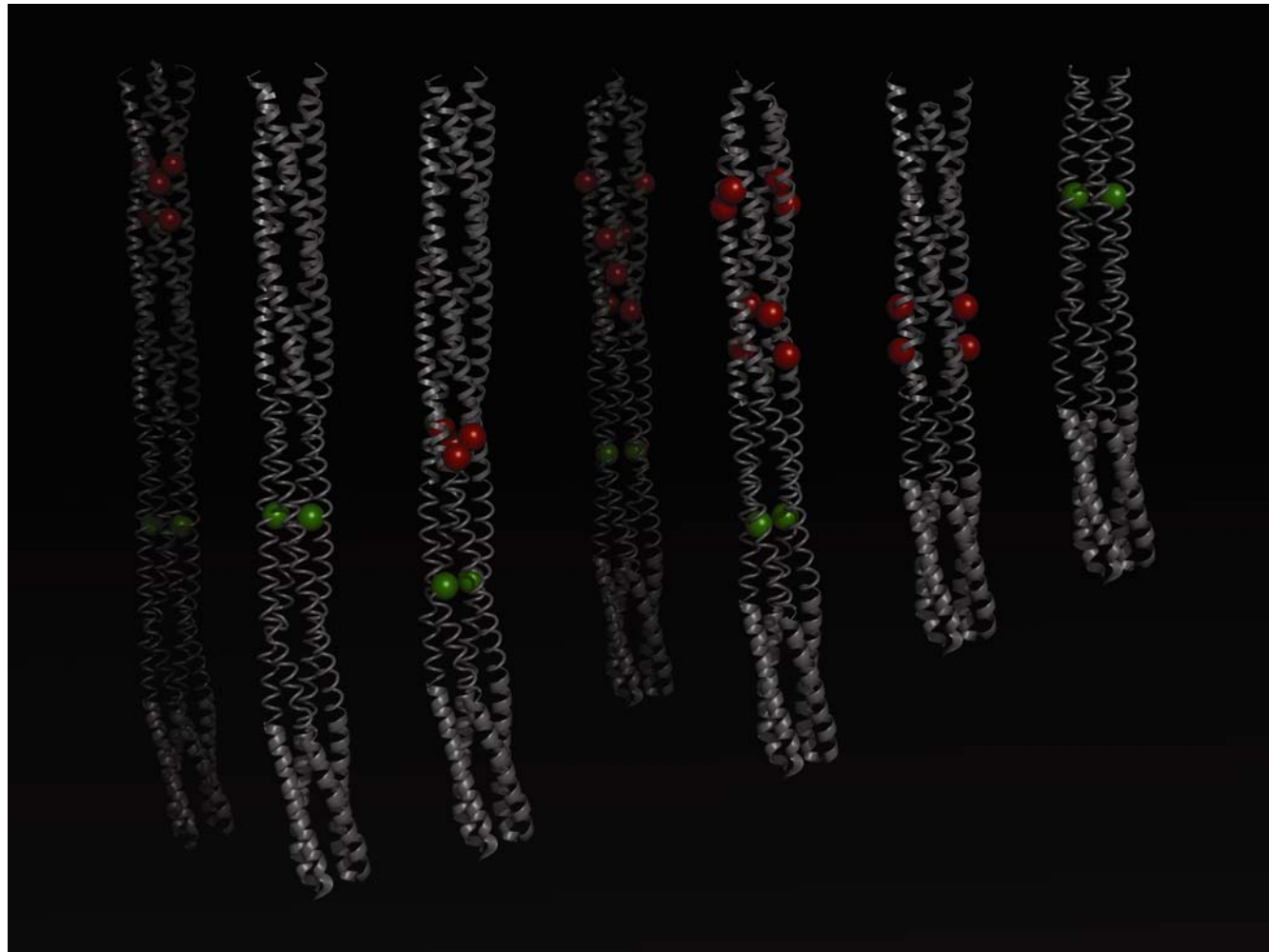


From the cover:

Evolutionary genomics reveals conserved structural determinants of signaling and adaptation in microbial chemoreceptors.

R. P. Alexander and I. B. Zhulin (2007)
Proc. Natl. Acad. Sci. USA 104:
2885-2890

New computational study reveals novel conserved features in chemoreceptors



R. P. Alexander and I. B. Zhulin (2007) *Proc. Natl. Acad. Sci. USA* 104: 2885-2890

Computational prediction of a novel sensor in all domains of life



OXFORD JOURNALS CONTACT US MY BASKET MY ACCOUNT

Bioinformatics

ABOUT THIS JOURNAL CONTACT THIS JOURNAL SUBSCRIPTIONS CURRENT ISSUE ARCHIVE SEARCH

Oxford Journals > Life Sciences > Bioinformatics > Bioinformatics Advance Access > 10.1093/bioinformatics/btm384

Bioinformatics Advance Access published online on September 12, 2007
Bioinformatics, doi:10.1093/bioinformatics/btm384

© The Author (2007). Published by Oxford University Press. All rights reserved. For Permissions, please email: journals.permissions@oxfordjournals.org

FIST: a sensory domain for diverse signal transduction pathways in prokaryotes and ubiquitin signaling in eukaryotes

Kirill Borziak and Igor B. Zhulin *

Joint Institute for Computational Sciences, The University of Tennessee – Oak Ridge National Laboratory, Oak Ridge, TN 37831-6173 U.S.A.

*To whom correspondence should be addressed. Prof. Igor Zhulin, E-mail: joulineib@ornl.gov

This Article

- ▶ [Advance Access manuscript \(PDF\)](#) **FREE**
- ▶ [Supplementary data](#)
- ▶ [Alert me when this article is cited](#)
- ▶ [Alert me if a correction is posted](#)

Services

- ▶ [Email this article to a friend](#)
- ▶ [Similar articles in this journal](#)
- ▶ [Similar articles in PubMed](#)
- ▶ [Alert me to new issues of the journal](#)
- ▶ [Add to My Personal Archive](#)
- ▶ [Download to citation manager](#)
- ▶ [Request Permissions](#)

Google Scholar

- ▶ [Articles by Borziak, K.](#)
- ▶ [Articles by Zhulin, I. B.](#)

PubMed

- ▶ [PubMed Citation](#)
- ▶ [Articles by Borziak, K.](#)
- ▶ [Articles by Zhulin, I. B.](#)

Contact

Igor B. Jouline (Zhulin) Ph.D.
Joint Institute for Computational Sciences
The University of Tennessee—Oak Ridge National Laboratory

Associate Professor
The University of Tennessee
UTK (865) 974-7687
ljouline@utk.edu

Senior R&D Staff Member
Oak Ridge National Laboratory
ORNL (865) 241-3697
joulineib@ornl.gov

Postdoctoral positions are available: email inquires are welcome