

# Kenneth Daily

---

## CONTACT INFORMATION

ICS2 241  
Institute for Genomics and Bioinformatics  
University of California, Irvine  
Irvine, CA, USA

*Voice:* (949) 300-9572  
*E-mail:* kdaily@ics.uci.edu  
*WWW:* www.kennedydaily.net

## RESEARCH INTERESTS

Bioinformatics, regulation of transcription, genome scale computational biology, machine learning, statistics for large datasets

## EDUCATION

**University of California, Irvine**, Irvine, California USA

Ph.D. Candidate, Computer Science, August 2006 (expected graduation date: September 2011)

- Advisors: Prof. Pierre Baldi, Prof. Suzanne Sandmeyer

**Indiana University**, Bloomington, Indiana USA

M.S., Bioinformatics, June 2006

- Advisor: Prof. Predrag Radivojac

B.A., Informatics, June 2004

- Advisor: Prof. Dennis Groth

## PROJECTS

### Current

Analysis of transcriptional regulation in during keratinocyte differentiation 2011

Transcriptional regulatory control of neural stem cell development, 2011

Analysis of yeast high-throughput sequencing data for Ty3 transposon insertions, 2009

Building resources for analysis of genome wide transcriptional regulation, 2008

### Past

Compression of high-throughput sequencing data, 2009

Similarity measures for chemical searching and retrieval, 2006

Prediction of posttranslational protein modifications, 2004-2006

Analysis of size of duplicated gene families,, 2003-2004

## HONORS AND AWARDS

Biomedical Informatics Training Grant, National Library of Medicine, 2006 - 2010.

Best Presentation, NLM Informatics Training Conference. Denver, CO, June 2010.

Travel Award, International Conference on Intelligent Systems for Molecular Biology, Stockholm, Sweden, June 2009.

Travel Award, IEEE CIS Computational Intelligence in Bioinformatics and Computational Biology, November 2005.

Informatics Barwise Scholar, Indiana University, 2004 - 2006.

## PUBLICATIONS

**Kenneth Daily**, Paul Rigor, Scott Christley, Xiaohui Xie, Pierre Baldi. "Data Structures and Compression Algorithms for High-Throughput Sequencing Technologies." BMC Bioinformatics, October 2010. PMID: PMC2964686

S. Joshua Swamidass, Chloe-Agathe Azencott, **Kenneth Daily**, Pierre Baldi. "A CROC stronger than ROC: measuring, visualizing and optimizing early retrieval." Bioinformatics, May 2010. PMID: PMC2865862.

**Kenneth Daily**, Predrag Radivojac, A. Keith Dunker. "Intrinsic disorder and protein modifications: building an SVM predictor for methylation." IEEE Symposium on Computational Intelligence in Bioinformatics and Computational Biology, CIBCB 2005, pp. 475-481, San Diego, California, U.S.A., November 2005.

PUBLICATIONS IN PREPARATION	<p><b>Kenneth Daily</b>, Paul Rigor, Sholeh Forouzan, Yimeng Dou, Vishal Patel, Xiaohui Xie and Pierre Baldi. "Genome-wide maps of candidate regulatory motif sites." In Preparation.</p> <p>Suzanne Sandmeyer, Kim Nguyen, <b>Kenneth Daily</b>, Xiaojie Qi, Paul Rigor, Sholeh Forouzan, Pierre Baldi. "Analysis of the Ty3 Retrotransposon in <i>Saccharomyces cerevisiae</i> Using Transposition Assays and High Throughput Sequencing Technologies." In Preparation.</p> <p>W. Jacob B. Biesinger, Jane Cho, <b>Kenneth Daily</b>, Paul Rigor, Douglas Bornemann, Rahul Warrior, Pierre Baldi, Kavita Arora, and Xiaohui Xie. "A Map of Candidate Regulatory Motifs in Fly." In Preparation.</p>
CONFERENCE PROCEEDINGS	<p>"MotifMap: Genome-Wide Map of Regulatory Binding Sites." Poster, HTS to P4 Medicine Conference. UCI, Irvine, CA, February 2011.</p> <p>"MotifMap: Genome-Wide Map of Regulatory Binding Sites." NLM Informatics Training Conference. Denver, CO, June 2010.</p> <p>"Analysis of the Ty3 Retrotransposon in <i>Saccharomyces cerevisiae</i> Using Transposition Assays and High Throughput Sequencing Technologies." NLM Informatics Training Conference. Portland, OR, June 2009.</p> <p>"Data Structures and Compression Algorithms for High-Throughput Sequencing." Poster, International Conference on Intelligent Systems for Molecular Biology. Stockholm, Sweden, June 2009.</p>
TEACHING	<p>Teaching Assistant, University of California, Irvine, 2010 - 2011</p> <p>Associate Instructor, Indiana University School of Informatics, 2004 - 2006</p> <p>Course Instructor, Indiana University School of Informatics, Summer 2005</p>
SKILLS	<p><b>Languages:</b> Python (TurboGears), R, Linux/Unix shell, Perl (with BioPerl), Matlab, PHP, Java, PHP, HTML (CSS), C/C++, SQL, XML, and SQL.</p> <p><b>Applications:</b> L<sup>A</sup>T<sub>E</sub>X, MySQL, Sun Grid Engine</p> <p><b>Operating Systems:</b> Linux/Unix, Windows.</p> <p><b>Bench work:</b> Basic molecular biology methods for DNA analysis in bacteria, yeast, and fly</p>
REFERENCES	<p><b>Professor Pierre Baldi</b>  School of Information and Computer Sciences  4038 Donald Bren Hall  University of California, Irvine  Irvine, CA 92697-3435  E-mail: pfbaldi@ics.uci.edu  WWW: <a href="http://www.ics.uci.edu/~pfbaldi">http://www.ics.uci.edu/~pfbaldi</a></p> <p><b>Professor Suzanne Sandmeyer</b>  Department of Biological Chemistry  University of California, Irvine  D240, D288 MED SCI I  Mail Code: 1700  Irvine, CA 92697  E-mail: sbsandme@uci.edu  WWW: <a href="http://webfiles.uci.edu/sbsandme/lab/">http://webfiles.uci.edu/sbsandme/lab/</a></p> <p><b>Professor Xiaohui Xie</b>  School of Information and Computer Sciences  4058 Donald Bren Hall  University of California, Irvine  Irvine, CA 92697-3435  E-mail: xhx@ics.uci.edu  WWW: <a href="http://www.ics.uci.edu/~xhx">http://www.ics.uci.edu/~xhx</a></p>