

## **Chuck Staben**

Associate Vice President for Research  
University of Kentucky  
Lexington, KY 40506-0225  
(859)257-9162(P) 323-2800 (FAX)  
[staben@email.uky.edu](mailto:staben@email.uky.edu)  
[www.research.uky.edu](http://www.research.uky.edu)

### **PROFESSIONAL EMPLOYMENT**

Associate Vice President for Research, University of Kentucky (2004-present)  
Biology Department Chair, University of Kentucky (2002-2003)  
Biology Department Acting Chair, University of Kentucky (2000-2002)  
Associate Professor, University of Kentucky (1995-present)  
Assistant Professor, University of Kentucky (1989-1995)  
Postdoctoral Researcher, Stanford University (1987-1989)  
Postdoctoral Researcher, Chiron Research Laboratories (1985-186)  
Graduate Research and Teaching Assistant, University of California, Berkeley (1978-1984)

### **EDUCATION**

Ph.D. in Biochemistry (1984) University of California, Berkeley, CA.  
Characterization of C<sub>1</sub>-Tetrahydrofolate Synthase, Product of the *Saccharomyces cerevisiae* ADE3 Gene (Dr. Jesse C. Rabinowitz, Advisor)

B.S. in Biochemistry (1978) University of Illinois, Champaign-Urbana, IL.

### **POSTDOCTORAL TRAINING**

Biology Department, Stanford University, Stanford, CA (1987-1989). Characterization of the *Neurospora crassa* mating type locus (Dr. Charles Yanofsky, Advisor).

Virology Department, Chiron Research Laboratories, Emeryville, CA (1985-1986). Nature and significance of sequence variation of the AIDS virus (Dr. Dino Dina, Advisor).

### **SELECTED PUBLICATIONS** (from total of 30)

1. **Li W, Staben C, Farman ML.** (accepted) TRUMATCH, a BLAST post processor. Bioinformatics.
2. **Li W, Rehmeyer CJ, Staben C, Farman ML.** (2004) TERMINUS - telomeric end-read mining IN unassembled sequences. Bioinformatics. Dec 7; [Epub ahead of print].
3. **Galagan JE, Calvo SE, Borkovich KA, Selker EU, Read ND, Jaffe D, FitzHugh W, Ma LJ, Smirnov S, Purcell S, Rehman B, Elkins T, Engels R, Wang S, Nielsen CB, Butler J, Endrizzi M, Qui D, Ianakiev P, Bell-Pedersen D, Nelson MA, Werner-Washburne M, Selitrennikoff CP, Kinsey JA, Braun EL, Zelter A, Schulte U, Kothe GO, Jedd G, Mewes W, Staben C, Marcotte E, Greenberg D, Roy A, Foley K, Naylor J, Stange-Thomann N, Barrett R, Gnerre S, Kamal M, Kamvysselis M, Mauceli E,**

**Bielke C, Rudd S, Frishman D, Krystofova S, Rasmussen C, Metzberg RL, Perkins DD, Kroken S, Cogoni C, Macino G, Catcheside D, Li W, Pratt RJ, Osmani SA, DeSouza CP, Glass L, Orbach MJ, Berglund JA, Voelker R, Yarden O, Plamann M, Seiler S, Dunlap J, Radford A, Aramayo R, Natvig DO, Alex LA, Mannhaupt G, Ebbole DJ, Freitag M, Paulsen I, Sachs MS, Lander ES, Nusbaum C, Birren B. (2003)** The genome sequence of the filamentous fungus *Neurospora crassa*. *Nature*. 422:859-68.

4. **Kronstad, J.W. and C. Staben** (1997) Mating type in filamentous fungi . *Ann. Rev. Genet.* **31**:245-276.
5. **Edelmann, S. E., and C. Staben.** 1994. A statistical analysis of sequence features within genes from *Neurospora crassa*. *Exp. Mycol.* **18**:70-81.
6. **Philly, M. L., and C. Staben.** 1994. Functional analyses of the *Neurospora crassa* MT a-1 mating type polypeptide. *Genetics* **137**:715-722.
7. **Ludewig, G., Y. Li, J. M. Williams, and C. Staben.** 1994. Pentamidine isethionate inhibition of *Saccharomyces cerevisiae* growth and respiration. *Antimicrob. Ag. Chemother.* **38**:1123-1128.
8. **Chang, S., and C. Staben.** 1994. Directed Replacement of *mt A* by *mt a-1* Effects a Mating Type Switch in *Neurospora crassa*. *Genetics* **138**:75-81.
9. **Ludewig, G., and C. Staben.** 1994. Characterization of the *PNT1* pentamidine resistance gene of *Saccharomyces cerevisiae*. *Antimicrob. Ag. Chemother.* **38**:2850-2856.
10. **Staben, C., and Yanofsky.** 1990. *Neurospora crassa* a mating type region. *Proc. Nat. Acad. Sci. USA* **87**:4917-4921.
11. **Glass, N. L., S. J. Vollmer, C. Staben, R. L. Metzberg, and C. Yanofsky.** 1988. DNAs of the two mating-type alleles of *Neurospora crassa* are highly dissimilar. *Science* **241**:570-573.
12. **Staben, C., and J. C. Rabinowitz.** 1986. Nucleotide Sequence of the *Saccharomyces cerevisiae* *ADE3* Gene Encoding C<sub>1</sub>-Tetrahydrofolate Synthase. *J. Biol. Chem.* **261**:4629-4637.
13. **Staben, C., and J. C. Rabinowitz.** 1983. Immunological crossreactivity of eukaryotic C<sub>1</sub>-tetrahydrofolate synthase and prokaryotic 10-formyltetrahydrofolate synthetase. *Proc. Nat. Acad. Sci. USA* **80**:6799-6803.

## **GRANT SUPPORT**

**Extramural Funding** (Present)

- Kentucky Biomedical Research Information Network (\$708,878 for year 1). National Institutes of Health, 8/2004-2009, subcontract on primary grant to Nigel Cooper, University of Louisville, 2P20RR016481-04.
- Center for Biologic Basis of Oral/Systemic Diseases, National Institutes of Health, 9/2004-7/2009, co-Investigator with Jeff Ebersole, 1P20RR020145-01.

#### **Extramural Funding (Past)**

- Kentucky Biomedical Research Information Network, Supplement (\$600,000). National Institutes of Health, 10/2002-12/2004, subcontract on primary grant to Nigel Cooper, University of Louisville.
- Kentucky Biomedical Research Information Network (\$1,000,000). National Institutes of Health, 10/2001-12/2004, subcontract on primary grant to Nigel Cooper, University of Louisville.
- Telomeres of Filamentous Fungi (\$600,000). National Science Foundation, co-PI. Primary Investigator, Mark Farman, Plant Pathology, University of Kentucky. (essentially an informatics subcontract of \$20,000/year for 3 years).
- Neurospora Genome Project (\$30,000 direct). National Science Foundation, subcontract on grant to B. Birren, Whitehead Institute, 10/2000-12/2002.
- *Pneumocystis carinii* Genome Project (\$200,000 direct). National Institutes of Health, subcontract on grant to M. Cushion, 2/1999-12/2002.
- Gene Expression in Normal and Damaged Rat Brain (\$50,000). Kentucky Spinal Injury Foundation, co-investigator with Dr. Steven Scheff.
- Bioinformatics: Genetics in the Genomics Age (\$115,000). National Science Foundation, 2/1998-2/2002.
- Genetic Determinants of the *Neurospora crassa* Life Cycle (\$315,000 [total direct and indirect]), National Science Foundation, 9/1995-9/1998, no-cost extension until 9/2000.
- Genetic Approach to Understanding *Pneumocystis* Therapy (\$362,355 total). National Institutes of Health, GM46193, 6/1/1991-5/31/1995.
- Genetic Determinants of the *Neurospora* Life Cycle (\$290,000 total). National Science Foundation, MCB-9107083, 1/1991-12/1995.
- Effect of Cigarette Smoking on *Pneumocystis* Pneumonia in the Rat Animal Model System (\$19,968). Tobacco and Health Research Institute, 7/1/1996-6/30/1997 (Declined).
- The regulation of mating and meiosis in *Neurospora crassa* by mating-type polypeptides (\$195,000 total, 1995-1997). (NSERC-Canada)-Collaboration with N. Louise Glass, funds to be used to support work in her laboratory in Canada.
- Mating Type Genes of *Pneumocystis carinii* (\$33,000 for research in my laboratory). University of Cincinnati Research Challenge Grant, 9/1994-3/1996, Co-investigators Melanie Cushion, George Smulian, VA Medical Center.

#### **INSTRUCTION**

##### Honors and Awards

College of Arts and Sciences, Distinguished Teacher 1997-2000 (Most prestigious teaching award offered by College)

College of Arts and Sciences, Outstanding Teacher 1996-1997  
Dean's "Top Ten" List: 1993-1998 (Student poll conducted by Dean)

#### Instructional activities, courses

BIO520 (Bioinformatics)—classroom and distance instruction (via TV, Internet) (1996-present)

BIO621 (Bioinformatics Projects course) (2001, 2002)

BIO304 (Genetics), BIO208 (Microbiology), assorted graduate-level seminars in molecular biology, genetics

#### **ADMINISTRATIVE EXPERIENCE**

Chair or Acting Chair, Department of Biology (2000-present)

- 31 tenure-track faculty
- 10 departmental staff (responsible for 13 additional grant-supported postdocs, staff)
- 60 graduate students (MS and Ph.D)
- 900 undergraduate majors
- Departmental budget of \$3,000,000 per year
- Departmental research grants and contracts totaling \$2.9 M in 2003

Director, Undergraduate Studies for School of Biological Sciences (1996-1999). Oversaw curriculum, advising for over 900 majors and 2000 non-majors

Section Head, Molecular and Cell Biology, School of Biological Sciences (1998-2000)

#### **PROFESSIONAL ACTIVITIES**

##### **Peer-Review Activities**

- NIH Site visit team, MIT, 2004
- Genetics Study Section, Member, NIH, 1999 –2003
- Special Study Section, NIH, 1999 (review of special genomics grants)
- Chair, Special Study Section, NIH, 1999 (review of molecular mycology grants)
- *Ad hoc* member, Genetics Study Section, NIH 1998, 1999 (twice)
- *Ad hoc* member, Microbial Physiology Study Section, NIH 1998,1999
- NSF EPSCoR Reviewer, Kentucky REG Grants
- *Ad hoc* reviewer: National Science Foundation, United States Department of Agriculture, Veterans Administration Research Service, tenure reviews for various universities
- Member, Association of Biomolecular Resource Facilities Education Committee (1999)
- Referee: *Applied and Environmental Microbiology*, *Biochemistry*, *Current Genetics*, *Fungal Genetics and Biology* (formerly *Experimental Mycology*), *Journal of Biological Chemistry*, *Molecular and General Genetics*, *Molecular Microbiology*, *Genetics*, *Proceedings of the National Academy of Sciences, USA*, *Molecular and Cellular Biology*
- Reviewer: Saunders Publishing Corporation, Wadsworth Publishing Corporation,

- Wiley Interscience, Kluwer, Harcourt Brace Corporation, Jones and Bartlett  
Life Sciences Interactive Media, Addison-Wesley
- Consultant: Virage, Inc., San Mateo, CA (Image Domain Expert-Biological Images)  
SciMagix, Inc., San Mateo, CA (Image Domain Expert-Biological Images)  
Lytos Grant Consulting

**Invited Seminars and Research Presentations** (selected, 1998-2003)

- Miami University of Ohio (2004)  
University of Rhode Island, College of Pharmacy (2003)  
SURA BIOGrid Workshop, Research Triangle Park, North Carolina, (2003)  
High-Performance Research Computing, Rio de Janeiro, Brazil (2002)  
Northern Kentucky University, Eastern Kentucky University Biology Departments (2001)  
University of Kentucky, Anatomy and Neurobiology Department (1999)  
Association of Biomolecular Resource Facilities, Durham, NC (1999)  
Chaired, Presented: Bioinformatics and Genomics Education: Challenges and Initiatives  
University of Georgia, Athens, GA (1998)  
Schering-Plough Corporation, Kenilworth, NJ (1998)  
Millennium Pharmaceuticals, Cambridge, MA (1998)  
Bristol Myers Squibb, Princeton, NJ (1998)

**UNIVERSITY SERVICE** (selected)

- Chair, Academic Strategic Planning Committee for University (2002-2003), one of 3  
University committees that wrote 2003-2006 strategic plan  
(<http://www.uky.edu/Home/2003-06StrategicPlan/plan.html>). Worked closely with  
senior administrators  
Member, Academic Planning and Priorities Committee (2003-present)  
Chair, University Senate Committee on Institutional Resources and Finances (2003-  
present)  
Member, University of Kentucky Budget Advisory Group (2004-present)  
Met monthly with Provost, Vice-Presidents (Budget, Finance, Research, Development),  
comptroller, Athletics Director to advise on University budget issues  
Member, University of Kentucky NCAA Academic Integrity Subcommittee  
(Recertification-2004)  
University Faculty Senator (2002-present, elected to Senate Council for 2004-2005)  
University Top 20 Taskforce (2002)  
Presidential taskforce to identify University of Kentucky goals, mission, assessment criteria  
Institutional Biosafety Committee (2002-present)  
Member, Search Committee for Pharmaceutical Sciences Division Head (2002)  
Member, University Task Force, Natural Products Center Development (2002-present)  
Biological and Biomedical Sciences Research Building Committee (completion Fall 2004)  
to oversee design of \$67M research building  
Member, Tracey Farmer Center for the Environment Establishing Committee (2001)  
Biocomputing Taskforce (2002-present)  
University Informatics Connection (subcommittee chair on bioinformatics) (2001-2002)

University Research Advisory Committee (1999-2000)  
Lexington Campus Research Advisory Committee (1999-2000)  
Chair, Arts and Sciences College Council (1999-2000)  
Member, Arts and Sciences College Council (1997-1999) (advises Dean of College on  
policy matters, oversees College curriculum)