

## Curriculum Vitae

### Margaret C. Werner-Washburne

#### Address:

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University of New Mexico  
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E-mail: [maggieww@unm.edu](mailto:maggieww@unm.edu)  
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#### Educational History:

B.A., 1971, Stanford University; Stanford, California, English  
M.S., 1979, University of Hawaii; Honolulu, Hawaii, Botany  
Ph.D., 1984, University of Wisconsin-Madison; Madison, Wisconsin, Botany with minor in  
Biochemistry  
Thesis title: Enterokinase Inhibitors in Plants. Sanford Siegel, advisor.  
Dissertation title: L-Aspartate transport into pea chloroplasts. Kenneth Keegstra, advisor.

#### Employment History – Academic positions:

Professor, 2002-present  
Vice Chair, Biology, 1997 -1998  
Associate Professor of Biology, 1994 - 2002  
Assistant Professor of Biology, 1988-1994  
NIH Post Doctoral Fellow, 1984-1988, University of Wisconsin, Madison  
Graduate student/NIH Trainee, 1979-1984, University of Wisconsin, Madison  
Research and Teaching assistant, 1976-1979, University of Hawaii, Honolulu

#### Employment History - Concurrent positions:

Consultant: in Genomics, including the Computer Sciences/Evolutionary Computing and  
Biosensors, Sandia National Laboratories, 1999-2004  
Interim director, Southwest Genomics and Biotechnology Alliance, 1999 – 2001  
Program director, Microbial Genetics, National Science Foundation, 1998-1999

#### Professional Recognition:

##### Academic Awards and Honors:

Andreoli-Woods Lecturer, Cal State LA, 2007  
Mujeres Valerosas award, Hispanic Women's Council, 2006  
AAAS Fellow, 2006  
Special presidential award for service to SACNAS, 2006  
SACNAS Distinguished Scientist Award, 2005  
EE Just Lecturer, American Soc for Cell Biology, 2005  
NIGMS MORE (Minority Opportunities in Research) Division Working Group, 2005 -2006  
Presidential Award for Excellence in Science, Math, and Engineering Mentoring, 2004  
Proclamation for service to NM from NM House of Representatives, March 2003  
NHGRI Genome Research Review Panel, NHGRI, 2001- 2005

**Academic Awards and Honors:**

AAAS Latina Scientist 2003  
Special service award, National Science Foundation, 1999  
Outstanding program officer, BIO/National Science Foundation, 1999  
UNM Regents' Lecturer, 1997-2000  
UNM Alumni Faculty Award for outstanding teaching and service to students, 1995  
Presidential Young Investigator Award, NSF, 1990-1996  
Sigma Xi Honor Society, 1984

**Scholarly achievements:**

**Articles in refereed journals (cited over 3500 times in scientific literature):**

A Hidden-state Markov Model for Cell Population Deconvolution

S. Roy, T. Lane, C. Allen, A.D. Aragon, M. Werner-Washburne. *Journal of Computational Biology* 13:174901774 (2006)

Multivariate curve resolution of time course microarray data

Peter D Wentzell, Tobias K Karakach, Sushmita Roy, M Juanita Martinez, Christopher P Allen, and Margaret Werner-Washburne. *BMC Computational Biology* 7:343 (2006)

Isolation of quiescent and non-quiescent cells from *Saccharomyces cerevisiae* stationary phase cultures

Chris Allen, Sabrina Büttner, Anthony D. Aragon, Jason A. Thomas, Osorio Meirelles, Jason E. Jaetao, Don Benn, Stephanie W. Ruby, Marten Veenhuis, Frank Madeo, and Margaret Werner-Washburne  
*J Cell Biology* 174:89-100 (2006)

Cell-Directed Assembly of the Bio-Nano Interface

HK Baca, C Ashley, E Carnes, D Lopez, J Flemming, D Dunphy, S Singh, Z Chen, N Liu, H Fan, GP López, SM Brozik, M Werner-Washburne, CJ Brinker  
*Science* 313: 337-341 (2006)

Release of sequestered mRNA is responsible for a massive, non-transcriptional increase in mRNA after oxidative stress in *S. cerevisiae* stationary-phase cultures

Anthony D. Aragon, Gabriel A. Quiñones, Edward V. Thomas, Sushmita Roy, and Margaret Werner-Washburne  
*Genome Biology* 2006 65/2: 357-360 (2006)

An Automated, Pressure-Driven Sampling Device for Harvesting from Liquid Cultures for Genomic and Biochemical Analyses

Anthony D. Aragon, Gabriel A. Quiñones, Chris Allen, Jason Thomas, Sushmita Roy, George S. Davidson, Peter D. Wentzell, Brian Millier, Jason E. Jaetao, Angelina L. Rodriguez, and Margaret Werner-Washburne  
*Journal of Microbiological Methods* doi:10.1016/j.mimet.2005.08.015.

Hyperspectral Microarray Scanning: Impact on the Accuracy and Reliability of Gene Expression Data

Jerilyn A. Timlin, David M. Haaland, Michael B. Sinclair, Anthony D. Aragon, M. Juanita Martinez, Margaret Werner-Washburne  
BMC Genomics 6:72 (2005)

A Packed Micro Column Approach to a Cell-Based Biosensor

Jeb H. Flemming, Helen K. Baca, Margaret Werner-Washburne, Susan M. Brozik, Gabriel P. López  
Sensors & Actuators 113: 376-381 (2005)

Inferring genetic networks from microarray data

S. Martin, G. Davidson, E. May, J-L Faulon, and M. Werner-Washburne  
3rd International IEEE (CSB), pg. 566-569 (2004)

Sleeping Beauty: Quiescence in *Saccharomyces cerevisiae*

Joseph V. Gray, Gregory A. Petsko, Gerald C. Johnston, Dagmar Ringe, Richard Singer, and Margaret Werner-Washburne  
Microbiol. Mol. Biol. Rev. 68:187-206 (2004)

Genomic analysis of stationary phase and exit in *Saccharomyces cerevisiae*: transcriptional profiling and analysis of essential genes. M. J. Martinez, AB Archuletta, AL Rodriquez, P Wentzell, AD Aragon, CP Allen, S Roy, and M. Werner-Washburne  
Molec Biol of the Cell 15: 5295-5305 (2004)

Design, Construction, Characterization, and Application of a Hyperspectral Microarray Scanner

Michael B. Sinclair, Jerilyn A. Timlin, David M. Haaland, and Margaret Werner-Washburne  
Applied Optics 43:2079-2088 (2004)

Hyperspectral Imaging of Biological Targets: The Difference A High Resolution Spectral Dimension And Multivariate Analysis Can Make

Jerilyn Timlin, David Haaland, Michael Sinclair, Monica Manginell, Susan Brozik, M. Juanita Martinez, Margaret Werner-Washburne, John Guzowski:  
ISBI 2004: 1529-1532 (2004)

Genomics in *Neurospora crassa*: From One-Gene-One-Enzyme to 10,000 Genes

Edward L. Braun, Donald O. Natvig, Margaret Werner-Washburne and Mary Anne Nelson  
Elsevier Applied Mycology & Biotechnology series, Fungal Genomics 4:295-313 (2004)

The Genome Sequence of the Filamentous Fungus *Neurospora crassa*

James E. Galagan<sup>1</sup>, Sarah E. Calvo<sup>1</sup>, Katherine A. Borkovich<sup>2</sup>, Eric U. Selker<sup>3</sup>, Nick D. Read<sup>4</sup>, William FitzHugh<sup>5</sup>, Li-Jun Ma<sup>1</sup>, Serge Smirnov<sup>1</sup>, Seth Purcell<sup>1</sup>, Bushra Rehman<sup>1</sup>, Timothy Elkins<sup>1</sup>, Reinhard Engels<sup>1</sup>, Shunguang Wang<sup>1</sup>, Cydney B. Nielsen<sup>1</sup>, Jonathan Butler<sup>1</sup>, David Jaffe<sup>1</sup>, Matthew Endrizzi<sup>1</sup>, Dayong Qui<sup>1</sup>, Peter Ianakiev<sup>1</sup>, Deborah Bell-Pedersen<sup>6</sup>, Mary Anne Nelson<sup>7</sup>, **Margaret Werner-Washburne**<sup>7</sup>, Claude P. Selitrennikoff<sup>8</sup>, John A. Kinsey<sup>10</sup>, Edward L. Braun<sup>11</sup>, Alex Zelter<sup>4,26</sup>, Ulrich Schulte<sup>12</sup>,

Gregory O. Kothe<sup>3</sup>, Gregory Jedd<sup>13</sup>, Werner Mewes<sup>9,17</sup>, Chuck Staben<sup>14</sup>, Ed Marcotte<sup>15</sup>, David Greenberg<sup>16</sup>, Alice Roy<sup>1</sup>, Karen Foley<sup>1</sup>, Jerome Naylor<sup>1</sup>, Nicole Stange-Thomann<sup>1</sup>, Robert Barrett<sup>1</sup>, Sante Gnerre<sup>1</sup>, Michael Kamal<sup>1</sup>, Manolis Kamvysselis<sup>1</sup>, Cord Bielke<sup>9</sup>, Stephen Rudd<sup>17</sup>, Dmitrij Frishman<sup>17</sup>, Svetlana Krystofova<sup>2</sup>, Carolyn Rasmussen<sup>18</sup>, Robert L. Metzberg<sup>19</sup>, David D. Perkins<sup>19</sup>, Scott Kroken<sup>20</sup>, David Catcheside<sup>21</sup>, Weixi Li<sup>14</sup>, Robert J. Pratt<sup>6</sup>, Stephen A. Osmani<sup>23</sup>, Colin P.C. DeSouza<sup>24</sup>, Louise Glass<sup>18</sup>, Marc J. Orbach<sup>25</sup>, J. Andrew Berglund<sup>3</sup>, Rodger Voelker<sup>3</sup>, Oded Yarden<sup>26</sup>, Mike Plamann<sup>27</sup>, Stephan Seiler<sup>27</sup>, Jay Dunlap<sup>22</sup>, Alan Radford<sup>28</sup>, Rodolfo Aramayo<sup>6</sup>, Donald O. Natvig<sup>7</sup>, Lisa A. Alex<sup>29</sup>, Gertrud Mannhaupt<sup>9</sup>, Daniel J. Ebbole<sup>30</sup>, Michael Freitag<sup>3</sup>, Ian Paulsen<sup>16</sup>, Matthew S. Sachs<sup>31</sup>, Eric S. Lander<sup>1,32</sup>, Chad Nusbaum<sup>1</sup> & Bruce Birren<sup>1</sup>  
Nature 422: 859 - 868 (2003)

Identification and removal of contaminating fluorescence from commercial and in-house printed DNA microarrays.

M. Juanita Martinez, Anthony D. Aragon, Angelina Rodriguez, Jose Weber, David Haaland, Jerilyn Timlin, Michael Sinclair, and Margaret Werner-Washburne NAR 31:e18 (2003)

Visual comparison of multiple genome-scale datasets.

Werner-Washburne, M, B. Wylie, E. Fuge, J. Galbraith, J. Weber, and G.S. Davidson. Genome Research 12: 1564-1573 (2002)

The genomics of stress responses.

A. Gasch and M. Werner-Washburne, Functional and Integrative Genomics 2:181-192 (2002)

Analysis of the *pdx-1 (snz-1/sno-1)* region of the *Neurospora crassa* genome: correlation of pyridoxine-requiring phenotypes with mutations in two structural genes.

Bean, L.E., W.H. Dvorachek, Jr., E.L. Braun, A. Errett, G.S. Saenz, M.D. Giles, M. Werner-Washburne, M.A. Nelson, and D.O. Natvig. Genetics 157: 1067-1075 (2001)

Characterization of the *SNO* and *SNZ* gene families in *Saccharomyces cerevisiae*: two highly conserved, co-regulated gene families involved in a response to nutrient limitation.

P.A. Padilla, E.K.Fuge, M.E. Crawford, A. Errett, M. Werner-Washburne J. Bact. 180: 5718-5726 (1998)

Yeast *bcy1* mutants with stationary phase-specific defects.

V. M. Peck, E.K. Fuge, P. A. Padilla, M.A. Gomez, and M. Werner-Washburne Current Genetics 32: 83-92 (1997)

Expressed sequences from the conidial, mycelial and sexual stages of *Neurospora crassa*.

M. A. Nelson, S. Kang, E. L. Braun, M. E. Crawford, P. L. Dolan, P. M. Leonard, J Mitchell, A. M. Armijo, L. Bean, E. Blueyes, T. Cushing, A. Errett, M. Fleharty, M Gorman, K. Judson, R. Miller, J. Ortega, I. Pavlova, J. Perea, S. Todisco, R. Trujillo, J. Valentine, A. Wells, M. Werner-Washburne, S Yazzie, and DO Natvig. Fungal Genetics and Biology 21: 348-363 (1997)

A stationary-phase gene in *Saccharomyces cerevisiae* is a member of a novel, highly conserved gene family.

Edward L. Braun, Edwina K. Fuge, Pamela A. Padilla, and Margaret Werner-Washburne  
*Journal of Bacteriology* 178: 6865-6872 (1996)

Stationary Phase in *Saccharomyces cerevisiae*

Margaret Werner-Washburne, E. L. Braun, M.E. Crawford, and V.M. Peck  
*Molecular Microbiology* 19:1159-1166 (1996)

Protein synthesis in long-term stationary phase cultures of *Saccharomyces cerevisiae*.

Edwina K. Fuge, Edward L. Braun, and Margaret Werner-Washburne  
*Journal of Bacteriology* 176:5802-5813. (1994)

Stationary phase in the yeast *Saccharomyces cerevisiae*.

M. Werner-Washburne, E. Braun, G.C. Johnston, and R. A. Singer.  
*Microbiological Reviews* 57:383-401. (1993)

Isolation and characterization of *AAP1*; a gene encoding an alanine/arginine aminopeptidase in yeast.

Dan Caprioglio, Christopher Padilla, and Margaret Werner-Washburne.  
*Journal of Biological Chemistry* 268:14310-14315. (1993)

Heat-shock mediated cell-cycle blockage and G1 cyclin expression in the yeast *Saccharomyces cerevisiae*.

A. Rowley, B. Butler, M. Werner-Washburne, G.C. Johnston, and R.A. Singer.  
*Molecular and Cellular Biology* 13:1034-1041. (1992)

The translation machinery and 70 kilodalton heat shock protein cooperate in protein synthesis.

R. J. Nelson, T. Ziegelhoffer, C. Nicolet, M. Werner-Washburne, and E. A. Craig.  
*Cell* 71: 97-105.(1992)

Bcy1, the regulatory protein of cAMP- dependent protein kinase, is differentially modified in response to the physiological status of the cell.

M. Werner-Washburne, David Brown, and Edward Braun.  
*Journal of Biological Chemistry* 266:19704-19709. (1991)

Yeast Hsp70 RNA levels vary in response to the physiological status of the cell.

M. Werner-Washburne, J. Becker, J. Kosic-Smithers, and E. A. Craig.  
*Journal of Bacteriology* 171: 2680-2688. ( 1989)

Expression of members of the *S.cerevisiae* *HSP70* multigene family.

M. Werner-Washburne and E.A. Craig.  
*Genome* 31 :684-689. ( 1989)

*SSCI*, an essential member of the yeast *HSP70* multigene family, encodes a mitochondrial protein.

E.A. Craig, J. Kramer, J. Shilling, M. Werner-Washburne, S. Holmes, J. Kosic-Smithers, and C.M. Nicolet.  
*Molec. Cell Biol.* 9:3000-3008. (1989)

A subfamily of stress proteins facilitates translocation of secretory and mitochondrial precursor polypeptides.

R. Deshaies, B.D. Koch, M. Werner-Washburne, E. Craig, and R. Schekman.  
*Nature* 332:800-805. (1988)

Complex interactions among members of an essential subfamily of Hsp70 genes in yeast.

M. Werner-Washburne, D. Stone, and E.A. Craig.  
*Mol. Cell Biol.* 7: 2568-2577.(1987)

L-Aspartate transport into pea chloroplasts. Kinetic and inhibitor evidence for multiple transport systems.

M. Werner-Washburne and K. Keegstra  
*Plant Physiol.* 78: 221-227. (1985)

Precursors to two chloroplast proteins bind to the outer chloroplast membrane prior to import.

K. Cline, M. Werner-Washburne, T.H. Lubben, and K. Keegstra.  
*J. Biol. Chem.* 260: 3691-3696. (1985)

Adenine nucleotide translocase dependent anion transport in pea chloroplasts.

G. Woldegiorgis, S. Voss, E. Shrago, M. Werner-Washburne, and Kenneth Keegstra.  
*Biochem. Biophys. Acta* 810: 340-345.(1985)

Thermolysin is a suitable protease for probing the surface of intact pea chloroplasts.

K. Cline, M. Werner-Washburne, J. Andrews, and K. Keegstra.  
*Plant Physiol.* 75: 675-678. (1984)

The chloroplast envelope: Is it homologous with the double membranes of mitochondria and gram-negative bacteria?

K. Keegstra, M. Werner-Washburne, K. Cline, and J. Andrews.  
*J. of Cellular Biochem.* 24: 55-68. (1983)

Analysis of pea chloroplast inner and outer envelope membrane proteins by two-dimensional gel electrophoresis and their comparison with stromal proteins.

M. Werner-Washburne, K. Cline, and K. Keegstra.  
*Plant Physiol.* 73: 569-575. (1983)

An adenine nucleotide-phosphoenolpyruvate counter-transport system in C<sub>3</sub> and C<sub>4</sub> plant chloroplasts.

G. Woldegiorgis, S. Voss, E. Shrago, M. Werner-Washburne, and K. Keegstra.  
*Biochem. Biophys. Res. Comm.* 116:945-951. (1983)

Survey of plants for enterokinase inhibitors.

M. Werner-Washburne, A. Lau, and H. Ako.  
*Biochem. Biophys. Res. Com.* 92: 1243-1249. (1980)

**Articles appearing as chapters in edited volumes:**

Robust methods for microarray analysis

George S. Davidson, Shawn Martin, Kevin W. Boyack, Brian N. Wylie, Juanita Martinez, Anthony Aragon, Margaret Werner-Washburne, Mónica Mosquera-Caro, Cheryl Willman  
Genomics and Proteomics Engineering in Medicine and Biology, IEEE ed. Metin Akay;  
pp. 99-130 (2007)

Stationary phase in the yeast *Saccharomyces cerevisiae*.

E. K. Fuge and M. Werner-Washburne. 1997 *In* "Yeast Stress Responses", Hohmann S and Mager WH, eds., Molecular Biology Intelligence Unit, R.G. Landes Company, Austin, TX (1997), pp. 53-74

Molecular requirements for protein translocation into the endoplasmic reticulum.

R.Deshaies, J.Rothblatt, S.Sanders, M. Werner-Washburne, E.Craig, and R.Shekman.  
p. 187-198. *In* Bissell, Deho, Sironi, Torriani (ed.), Gene Expression and Regulation: The Legacy of Luigi Gorini. Elsevier, N.Y. ( 1988)

Metabolite transport across the chloroplast envelope.

M. Werner-Washburne and K. Keegstra.

Oxford Surveys of Plant Mol. and Cell Biol. 2:123-145. (1985)

Dicarboxylate transport into isolated chloroplasts. The evidence for multiple carrier systems.

M. Werner-Washburne and K. Keegstra.

*In* Proc. 14th Steenbock Symposium "Nitrogen Fixation and CO<sub>2</sub> Metabolism." P.W.

Ludden and J.E. Burris, eds. Elsevier Publ., N.Y. pp. 389-397.(1985)

**Other writings (video/patents/government reports/articles):**

A Perfect Mix

Findings Magazine (NIGMS- NIH)

Fall, 2003

[http://biology.unm.edu/biology/maggieww/Public\\_Html/PerfectMix.pdf](http://biology.unm.edu/biology/maggieww/Public_Html/PerfectMix.pdf)

Interagency Report on the Federal Investment in Microbial Genomics

Coordinated and partially written by M. Werner-Washburne

Biotech. Research Working Group, subcommittee of the NSTC Biotechnology Committee

Office of Science and Technology Policy, 2000

[http://www.ostp.gov/html/microbial/2000microbial/nsf00203\\_1.htm](http://www.ostp.gov/html/microbial/2000microbial/nsf00203_1.htm)

Following the Coil of Life

Albuquerque Tribune, January 1, 2000

[http://biology.unm.edu/biology/maggieww/Public\\_HTML/followingthecoil.htm](http://biology.unm.edu/biology/maggieww/Public_HTML/followingthecoil.htm)

Southwest Genomics and Biotechnology Alliance White Paper

(<http://www.sandia.gov/swgaba>), July 1999

The mystery of an ancient gene

NSF/PBS/LANL supported video (28 minutes)

Produced by Denise Wallen and Larry Walsh.

December, 1997. Shown nationally, April 1998.

**Invited or refereed talks/presentations to professional meetings and seminar assemblies:  
(past 5 years)**

Genomics of the quiescent state in yeast  
U Washington Genome Center  
Seattle, Washington, March 2007

Mentoring  
U Washington Department of Biology  
Seattle, Washington, March 2007

Genomics of the quiescent state in yeast  
U Montana  
Missoula, MT, April, 2007

Special seminar: Genomics and Native Americans  
Salish-Kootenei Tribal college  
Pablo, MT, April 2007

The “Omics” Revolution in the Biological Sciences – The Necessity  
for the Interdisciplinary Approach  
C. Allen, A. D. Aragon, S. Roy, O. Meirelles, and M. Werner-  
Washburne  
IPSI 2006, Lake Bled, Slovenia

Genomic approaches to study the quiescent state  
National Association of Biology Teachers  
Albuquerque, October 2006

Phylogenomics presentation  
LANL- UNM Bioenergy Center Group  
September, 2006

Isolation of quiescent cells  
UNM PREP program  
September, 2006

Characterization of quiescent and non-quiescent cells from yeast SP culture  
Yeast Genetics and Molecular Biology Meeting  
Princeton, NJ, July 2006

Mentoring  
NSF-QEM Workshop  
Albuquerque, March 2006  
Microarray Analysis for Biological Processes in Yeast

New Mexico Bioinformatics Symposium  
Santa Fe, March 2006

Quiescence and genomics  
Southwest Junior Science and Humanities Symposium  
Albuquerque, March 2006

Quiescence in yeast: When you come to a fork in the road, take it  
UTSA  
San Antonio, TX, March, 2006

Studies on the quiescent state in yeast  
EE Just Lecture  
Amer Soc for Cell Biology  
San Francisco, CA, Dec 2005

Using genomics to uncover new biology: G<sub>0</sub> in yeast  
SACNAS  
Denver, CO, Sept 2005

Mentoring  
Amer Soc for Cell Biol  
Washington, DC, Dec 2004

Using genomics to understand the mysteries of biology  
Annual Biomedical Research Conference for Minority Students  
Dallas, TX, Nov 2004

Improved Microarray Analysis and with Hyperspectral Imaging and Multivariate Curve  
Resolution  
Chips to Hits  
Boston, MA, Sept 2004

Genomic analyses of rapid responses in yeast cells  
NSF and NIH (2 seminars)  
Arlington and Bethesda, March 31 and April 2, 2004

From 0 to 60 in seconds: Insights into the quiescent state in yeast  
Pharmacy and Toxicology Department  
University of New Mexico; March 1, 2004

Genomic analyses of rapid responses in yeast cells, or "Human brains are really small!"  
Margaret Werner-Washburne, Gabriel Quinones, Angelina Rodriguez, Jason Jateo, Peter  
Wentzell, Anthony Aragon, and Juanita Martinez  
2nd New Mexico Workshop on Computational Cell Biology: Microscopy, Membrane  
Biology and Modeling for Biosignaling Research  
Santa Fe, January 2004

Genomics: an interdisciplinary approach

NIGMS-sponsored symposium  
SACNAS national meeting  
Anaheim, CA, Sept 2002

Use of the Visualization and Clustering Tool, VxInsight, for Comparison of Genome-Scale Data Sets  
Microarray Data Analysis meeting, Cambridge Healthtech Institute  
Washington, DC, Sept 11-13, 2002

Comparative Visualization of Genome-Scale Datasets  
University of Maryland, Bioinformatics Visualization Workshop  
College Park, MD, June, 2002

Visual analysis of genome-scale datasets  
UNM Genome Symposium  
Albuquerque, NM; March, 2002

Concurrent visual analysis of genome-scale datasets: from model systems to models  
Rosenstiel Center; Brandeis University  
Boston, MA; March 2002

A Path With Heart in the Sciences  
Genomics symposium- UNM Bridges Program  
Albuquerque, NM; January 2002

Gene Expression Analysis  
GenoSpectra  
Fremont, CA; January 2002

Finding a path with heart in the sciences  
UNM AGEF program national meeting  
Albuquerque, NM; November, 2001

Moderator: Biotechnology Session  
Genome Sequencing and Analysis Conference  
San Diego, CA; October 2001

Visual analysis of distinct genome-scale datasets: Opening the doors of life  
Society for the Advancement of Chicanos and Native Americans in the Sciences  
Phoenix, AZ Sept, 2001

Stationary phase in yeast: A genomic analysis  
International Conference on Yeast Genetics and Molecular Biology  
Prague; Aug 26-31, 2001

Visual comparison of genome-scale datasets from yeast: Insights into cellular function.  
The Institute for Genome Research (TIGR),  
Rockville, MD; June 12, 2001

The Yin and Yang of Genomics: doing it - microarray analysis of stationary-phase yeast- and teaching it.

National Science Foundation; Arlington, VA; June 13, 2001

Human Genomics in the New Millennium

UNM Cultural Studies Colloquium

Albuquerque, NM; Feb 14, 2001

Microarray analysis

Sandia National Laboratories

Albuquerque, NM; Feb 21, 2001

Genomics in General

American Association of University Women

Santa Fe, March 7, 2001

The Blessings of Being a Scientist

SREB/WICHE/McNair meeting

Compact for Faculty Development

Orlando, Florida; Oct, 26-29, 2000

[http://biology.unm.edu/biology/maggieww/Public\\_Html/sreb.htm](http://biology.unm.edu/biology/maggieww/Public_Html/sreb.htm)

Moderator: Biotechnology session

Genome Sequencing and Analysis Meeting (TIGR)

Miami, Sept. 2000

Functional Genomics

NSF Wood's Hole Meeting on Microbial Genomics

Woods Hole, MA, Aug 10-11, 2000

Exit from stationary phase in yeast: Gene expression analysis

Yeast Genetics and Molecular Biology Meeting

Seattle, WA; July 25-30, 2000

Genomics and its challenge for minority education

Zeta Phi Beta National Conference

Philadelphia, PA ; July 6-7. 2000

Genomics: A Revolution Before Our Eyes

AAAS SWARM meeting

Las Cruces, NM; April 10, 2000

Insight with VxInsight

Southwest Genomics and Biotechnology Alliance – Day of Talks I

Albuquerque, NM; March 22, 2000

**Contributed Abstracts and Presentations (all invited):**

Predicting Protein-protein interactions using amino acid composition  
Sushmita Roy, Terran Lane, and Margaret Werner-Washburne  
RECOMB Conference on Systems Biology, San Diego, CA, Dec 2006

Cell Population Deconvolution using Particle filters  
Sushmita Roy, Terran Lane, Chris Allen, Anthony Aragon and Maggie Werner-Washburne  
RECOMB, Venice, Italy, April 2006

A Datamining Approach to Cell Population Deconvolution from Gene Expressions using Particle Filters  
S Roy, T Lane, M Werner-Washburne  
BIOKDD Workshop on Datamining in Bioinformatics  
Chicago, IL August, 2006

RNSim: A simulator for Gene Regulatory Networks.  
S. Roy, T Lane, M Werner-Washburne  
CETI meeting, Albuquerque, 2006

Cell Population Deconvolution from Microarray Data using Particle filters  
Sushmita Roy, Terran Lane, Chris Allen, Anthony D. Aragon, Margaret Werner-Washburne  
UNM Biocomputing Day, April, 2005

A Probabilistic Approach for Cell Population Deconvolution from Microarrays  
Sushmita Roy, Terran Lane, Chris Allen, Anthony Aragon, Margaret Werner-Washburne  
Biology Research Day, April 2005

Analysis of Distinct Sub-Populations from *Saccharomyces cerevisiae* Stationary-phase Cultures Identifies a Post-Diauxic Shift Cell –Fate Determination  
CP Allen, M Werner-Washburne  
Amer Soc for Cell Biolgy  
San Francisco, CA Dec 2005

A Datamining approach to cell population deconvolution from gene expressions using particle filters  
S. Roy, T. Lane, C. Allen, A. D. Aragon, M. Werner-Washburne  
Fifth ACM SIGKDD Workshop on Data Mining in Bioinformatics. Chicago, IL, 2005

*S. cerevisiae* cells in stationary-phase cultures respond to oxidative stress through a rapid release of sequestered mRNA  
A Aragon, M Werner-Washburne  
Amer Soc for Cell Biolgy  
San Francisco, CA Dec 2005

Microarray Analysis using VxInsight and PAM

George S. Davidson, David Hanson, Shawn Martin, Margaret Werner-Washburne, and Mark D. Rintoul  
DOE Genomes to Life  
Orlando, FL; Jan 2005

Separation and characterization of quiescent and senescent cells from *S. cerevisiae*  
stationary-phase cultures  
C. P. Allen, S. Santa Anna-A., J. E. Jaetao, M. C. Werner-Washburne  
American Society for Cell Biology  
Washington, DC, Dec, 2004

Genomic analysis of stationary phase and exit in *Saccharomyces cerevisiae*:  
transcriptional profiling and identification of novel essential genes  
Juanita Martinez, Amanda Archuletta, Angelina Rodriguez, Anthony Aragon, Sushmita Roy, Chris Allen, Peter Wentzell, Margaret Werner-Washburne  
Yeast Genetics and Molecular Biology Meeting  
Seattle, WA, July 2004

Quiescent yeast cells exhibit a rapid response to oxidative stress  
Anthony D. Aragon, Gabriel A. Quinones, Margaret Werner-Washburne  
Yeast Genetics and Molecular Biology Meeting  
Seattle, WA, July 2004

Data mining in microarray analysis  
Sushmita Roy and Margaret Werner-Washburne  
Depts of Computer Sciences and Biology  
Biology Research Day, April 2003

Methods to Improve the Efficiency of the Quantitative Analysis of Hyperspectral Image  
Data  
David M. Haaland, Jerilyn A. Timlin, Michael R. Keenan, Mark H. Van Benthem,  
Michael B. Sinclair, M. Juanita Martinez, and Margaret Werner-Washburne, " Pittsburgh  
Conference, Orlando, FL, (March 9-14, 2003).

Identification and removal of contaminating fluorescence in the Cy3 channel of DNA  
microarrays  
Anthony D Aragon, M. Juanita Martinez, Jose M. Weber, Angelina L. Rodriguez, Jerilyn  
A. Timlin, Michael B. Sinclair, David M. Haaland, and Margaret Werner-Washburne  
Biology Research Day, April, 2003

Analysis of Transcriptional Changes in Quiescent Yeast Cells in Response to Stress  
Anthony D. Aragon, Gabriel A. Quinones, and Margaret Werner-Washburne  
SACNAS National Meeting, Albuquerque, October 2003

A Genomic Analysis of Quiescence and Exit from the Quiescent State in *S. cerevisiae*  
Juanita Martinez, Anthony Aragon, Amanda Archuletta, Angelina Rodriguez, Sushmita  
Roy, Margaret Werner-Washburne  
International Yeast Genetics Meeting, Göteborg, Sweden, July 2003

New Hyperspectral Microarray Scanner for Improved Microarray Analyses

David M. Haaland, Jerilyn A. Timlin, Michael B. Sinclair, Mark H. Van Benthem.

Juanita Martinez, Anthony Aragon, Angelina Rodriguez, Jose Weber, and Margaret Werner-Washburne

Beacon meeting, NIH, June 2002

Multivariate Curve Resolution for Hyperspectral Image Analysis: Applications to  
Microarray Scanner Fluorescence Images

David M. Haaland, Jerilyn A. Timlin, Michael B. Sinclair, and Mark H. Van Benthem.

Juanita Martinez, Angelina Rodriguez, Anthony Aragon, Angelina Rodriguez, Jose Weber, and Margaret Werner-Washburne

CAC meeting, 2002

Characterization of and solutions for background autofluorescence in the Cy3 channel of  
DNA microarrays.

Anthony D. Aragon, Jose Weber, Juanita Martinez, Angelina Rodriguez, David Haaland\*, Jeri Timlin\*, Michael Sinclair\*, and Margaret Werner-Washburne

Biology Research Day; April 2002

Phenotypic Analysis of Genes Expressed in Stationary Phase Cells of the Yeast

*Saccharomyces cerevisiae*

A. Archuletta, E. Fuge, and M. Werner-Washburne

Biology Research Day; April 2002

Concurrent Visual Analysis of Genome-Scale Datasets: Novel Insights into Gene Function and  
Experimental Design

Margaret Werner-Washburne, Judith Galbraith, Mark Fleharty, Jose Weber, Edwina Fuge,  
Brian N. Wylie, Kevin W. Boyack, and George S. Davidson

American Society for Cell Biology

Washington, DC, Dec 8-12, 2001

Concurrent Visual Analysis of Genome-Scale Datasets: Novel Insights into Gene Function and  
Experimental Design

Margaret Werner-Washburne, Judith Galbraith, Mark Fleharty, Jose Weber, Edwina Fuge,  
Brian N. Wylie, Kevin W. Boyack, and George S. Davidson

Genome Sequencing and Analysis Conference

San Diego, October, 2001

Yeast signaling pathways involved in stationary-phase survival

A. Colina, A. Errett, A. Sanchez, E. Fuge, and M. Werner-Washburne

Yeast Genetics Meeting

Seattle, WA, July 25-30, 2000

Exit from stationary phase (quiescence) in *Saccharomyces cerevisiae* transcriptional profiling,  
analysis of the instrument, and incorporation of VxInsight

G. Davidson, E. Fuge, and M. Werner-Washburne

DOE Human Genome Meeting

Santa Fe, NM; Feb 28-Mar 3, 2000

Clustering and Visualizing Yeast Microarray Expression Data using VxInsight(tm)  
G. Davidson, E. Fuge, and M. Werner-Washburne  
DOE Contractors meeting  
Santa Fe, NM, Feb 27-March 3, 2000

**Research Funding (~ \$9M):**

National Bioenergy Resource Center - pending

P.I. Gary Resnick, LANL  
1/1/08 – 12/31/13 (\$125M total, \$1,040,000 MWW part)

The biogenesis and survival of vegetative, quiescent yeast cells

P.I. M. Werner-Washburne, NSF MCB 0645854  
3/1/07 – 2/28/10 (\$477,104 + supplements)

Genomic analyses of quiescent and non-quiescent cells in yeast stationary-phase cultures

P.I. M. Werner-Washburne, NSF MCB 0445631  
6/1/05 – 5/31/07 (\$130,000)

UNM-IMSD 5R25GM060201

P.I. M. Werner-Washburne, NIH-MORE  
1/1/05-12/31/08 (approx \$500K per year direct))

Presidential Award for Excellence in Science, Math, and Engineering Mentoring

P.I. M. Werner-Washburne, NSF  
5/1/04 – 4/30/06 (\$10,000) NSF – EHR 0342901

SACNAS Genomics Training Grant

Co-PI M. Werner-Washburne (P.I. Luis Haro)  
T32- 9/1/04 – 8/31/08 (\$250,000 direct)

Compendium of Gene Expression in Stationary-Phase Yeast

P.I. M. Werner-Washburne, NIH- NIGMS RO1 GM67593  
RO1 – 7/1/02-6/30/06 (\$1.200,000 direct over four years)

DNA printing- Sandia National Laboratories, PI Susan Brozik

10/1/01 – 9/30/02 (\$100,000)

Supplement to National Institutes of Health- National Human Genome Research Institute grant (\$30,000) plus supplement to Initiative for Minority Student Development grant (\$30,000) for a microarray scanner. 9/1/01

Microarray analysis (adaptation of visualization software for analysis of complex, genome-scale datasets) and cell-based biosensor (using genomic approaches), Sandia National Laboratories

Co-PI, M. Werner-Washburne  
11/30/00-9/30/01(approx. \$90,000)

Exit from stationary phase: gene expression and its consequences

P.I. M. Werner-Washburne, National Science Foundation  
3/1/01-1/31/03 (\$460,000 total for three years)

A two-hybrid system for use in non-dividing yeast cells

P.I. M. Werner-Washburne; National Institutes of Health – National Human Genome  
Research Institute R21- HG02262  
1/1/01 – 12/31/02 (\$200,000 – direct costs for two years)

Microarray analysis of expression during exit from stationary phase in yeast.

P.I. M. Werner-Washburne; Sandia National Laboratories  
1999; (\$25,000)

Study of gene expression in non-dividing cells.

P.I. M. Werner-Washburne; Sandia National Laboratories  
June 1 – August 31, 2000 (\$13,000)

The role of Snz and Sno proteins in *Saccharomyces cerevisiae*.

P.I. M. Werner- Washburne; National Science Foundation  
September 1, 1998 – August 31, 2001 (\$110,000/yr)

Understanding the silence: cells in stasis (production of a video for PBS broadcast).

P.I. M. Werner- Washburne; National Science Foundation -  
Special supplement for integrating research and education;  
Sept, 1996 - August, 1998; Award: \$50,000 plus contract with Los Alamos  
National Laboratories for animation: \$34,000

Developmental regulation of signal transduction: Bcy1p in stationary-phase yeast.

P.I. M. Werner- Washburne; National Science Foundation;  
Sept, 1996 - August, 2000 Award: \$240,000 plus supplements

Characterization of a novel, stationary-phase gene in the yeast *Saccharomyces cerevisiae*.

P.I. M. Werner- Washburne; National Science Foundation;  
May, 1995 - April, 1998 Award: \$380,000

The *Neurospora* Genome Sequencing Project.

co-P.I. M. Werner-Washburne. National Science Foundation, HRD (for student  
training) August, 1995 - July, 1998 Award: \$372,000 plus \$300,000 matching funds

The role of gene regulation in starvation-induced arrest in the yeast *Saccharomyces cerevisiae*.

P.I. M. Werner-Washburne. Presidential Young Investigator Award, NSF.  
July, 1990 - June, 1996. Award: \$450,000

Establishment of a molecular biology facility.

P.I. M. Werner-Washburne. National Science Foundation, NSF-HRD.

Sept, 1992- Sept, 1996. Award: \$328,000 plus \$300,000 in matching funds.

The role of gene regulation in starvation-induced arrest in the yeast *Saccharomyces cerevisiae*.  
P.I. M. Werner- Washburne; National Science Foundation, Microbial Genetics  
Nov, 1989 - Apr, 1995. Award: \$600,000, including supplements

**Fellowships:**

Postdoctoral Research Fellow, 1984-1987, National Institute of Health  
Postdoctoral Award, 1984, National Science Foundation, (not activated)  
Predoctoral Trainee, 1981-1984, National Institute of Health  
Advanced Opportunity Fellow, 1979-1981, University of Wisconsin  
Research Grant, 1978, Pacific Tropical Botanical Gardens, Hawaii  
Regents Scholar, 1974-1975, University of Minnesota  
Elizabeth Crosset Scholar, 1967-1971, Stanford University

**Teaching:**

Post doctoral advisement (5 minorities of 8 post docs):

Dan Caprioglio, 1991- 1994; Current position; Assoc. Prof; University of Southern Colorado,  
Pueblo, CO)

Edwina Fuge, 1994 – 1999; Current position: Consultant to Sandia National Laboratories

Vickie Peck, 1994-1998, Current position, Consultant to Sandia National Laboratories

Ana Colina, 1999- 2001; Current position: Postdoctoral fellow; University of Calgary; Calgary,  
Canada.

Juanita Martinez, 2001 – 2005; NSF Minority Post Doctoral Fellowship 7/01-6/04

Chris Allen, 2003 – 2006 (NIH post doctoral fellowship)

Sonia Santa Anna – 2004 – 2005 (NIH career development awardee)

Don Benn – 2005 – present

Harriet Platero -2007 to present. Computational biology, supported by Saccharomyces Genome  
Database.

Doctoral advisement (3 minorities of 9 students):

Edward Braun, Ph.D. 1996 U.Fla.

*Thesis title:* “Protein synthesis in stationary-phase yeast: global patterns and  
characterization of Snz1p, a novel stationary-phase protein”

Five papers from thesis work

NIH post doctoral fellowship

*Current position:* Assistant professor; Univ. Florida, Gainesville, FL

Matt Crawford. Ph.D. 1999

*Thesis title:* “Characterization of a complex that forms in stationary-phase  
*Saccharomyces cerevisiae* containing the regulatory subunit of the cAMP-dependent  
protein kinase”

Four papers from thesis work

*Current position:* Manager at Proteome, Inc. a bioinformatics company

Pam Padilla, Ph.D. 1999

*Thesis title:* “Characterization of the *SNZ* and *SNO* gene families in *Saccharomyces cerevisiae*”

Three papers from thesis work

NSF Minority Postdoctoral Fellowship at Fred Hutchinson Cancer Research Center, Seattle, Washington

Current position: assistant prof., University of North Texas, Denton, TX

Anthony Aragon, Ph.D. 2006

*Thesis title:* “Ready, set, G0: Genomic analysis of the quiescent state in yeast”

Seven papers from thesis work

Post doctoral position in parasitology at UNM

Judith Galbraith, entered 2000, deceased 2003. Awarded posthumous PhD in Computational Biology

Osoorio Meirelles, entered 2004 (Math PhD program)

Sushmita Roy, MS 2005, entered PhD 2005 (CS)

Diego Martinez, entered 2006

George Davidson, entered 2006

M.S. Students (2 minorities of 4 students):

Allison Errett, M.S. 2000

“The late-acting *bcy1* mutant of *Saccharomyces cerevisiae*: implications for protein kinase A signaling in stationary phase”

Four papers from thesis work

Current position: technician at the Institute for Systems Biology; Seattle, WA

Chris Padilla, M.S. 1992

“Isolation and characterization of *Saccharomyces cerevisiae* genes involved in stationary phase regulation

One paper from thesis work

Patrick Doherty, M.S. 1992

“Characterization of *BCY1* expression in the yeast *Saccharomyces cerevisiae*”

Current position: Western regional sales manager; Qiagen, Inc.

Sushmita Roy, M.S., Computer Sciences student, entered 2002, MS 2005.

Undergraduate research students: (50 students; 37 minorities, including 14 Native Americans and 3 African-Americans)

Undergraduate honors students (3 minorities of 5 students):

**Braeden Butler**, B.S. 1993. Currently: R&D at Promega, Inc.; Madison, WI

Thesis title: Analysis of *BCY1* expression in the yeast *Saccharomyces cerevisiae*.

**Maria Gomez**, B.S. 1995; Currently: M.D. Stanford University; Anesthesiologist, Tucson, AZ

Thesis title: Protein kinase A activity during entry into and exit from stationary

phase in yeast.

**Stepahnie Atencio**, B.S. 1997, MD/PhD UC Medical School, 2005

Thesis title: Localization of Snz proteins using GFP fusions.

**JoAnna Bernacik**, B.S. 2000, Currently: applying for PA school.

Thesis title: Regulation of *SNZ1* expression in the yeast *Saccharomyces cerevisiae*

**Jason Padilla Jaetao**, B.S. 2005, (2001- 2005, IMSD/MARC) currently enrolled UNM School of Medicine

Thesis title: Differential expression of GFP-tagged proteins localized to mitochondria, lipid droplets, and p-bodies in separated fractions of *S. cerevisiae* stationary-phase cultures

*IMSD honors undergraduates:*

**Tom Pohl**, B.S. 2007.

Thesis title: Rad51-Independent interchromosomal double-strand break repair by gene conversion requires Rad52 but not Rad55, Rad57, or Dmc1.

### **Postgraduate research students**

Ray Joe, 2006 - (NIH-PREP program)

Gabriel Quinones, 2004-2005 (current PhD student, Stanford)

**Undergraduate research students** (38 minorities of 52, not including honors students or the 50 IMSD students I have mentored or the 100 other students around the country that I have helped.):

Phillip Tapia, 2006-

Myriahh Chavez, 2005, currently planning on graduate school

Daryl Traylor, 2005, IMSD

Jennifer Ziegler, 2004-2005

Kristy Mascarenas, 2004 – 2005

Funmi Abosedo, 2004

Shayne Bennaly, 2003- 2005

Tina Pham Nguyen, 2003, UNM medical school

Laralea Chavez, 2003-2004, working at Bueno Foods

Lewis Tribby, 2002- 2003, PhD student

Corie Hatch, 2001- 2002, technician at SOM

Christina Humphreys, 2001

Raquel Lazarin, 2001, graduate school in forensics

Diana Aranda, 2000- 2001, currently doing research in computer sciences

Angelina Sanchez, 1999- 2001, currently a technician in my laboratory

Ashley Davidson, 2000, PhD student in genetics, Texas Tech University

Jessica Gandy, 1999, Navy ROTC, graduated '03

Amanda Archuleta, 1999- 2004, tech at Sandia National Laboratories

Novaline Wilson, 1998, summer Hughes program

Al Lopez, 1998, TVI-UNM Bridge program

Glenn Rowe, 1998, summer program from Boston University, Goldwater Awardee, 1999, currently a graduate student at Yale

Anver Moxey 1998, summer program from Boston University

Shane Espinoza , 1997-1998

LeJette Kennedy, 1997, summer program from Boston University

Charles Keller, 1997-1999, current graduate student at Columbia University

Harriet Platero, 1997, PhD, now a post-doctoral student with SGD  
Amy Hahn, 1997 -1998, currently in PhD program, NAU  
Robert Alsbury, 1997  
Anne Marie Armijo, 1996-1997  
Jay Sengupta, 1997  
Christy Tarleton, 1996-1997, technician at SOM  
Paul Lawrence, 1996, PhD student, Brookhaven.  
Jose Weber, 1995-1996, 2000- 2003,  
Dipesh Goel, 1995-1996  
Tamy Johnson (1994), transferred to NMSU  
Benjamin Padilla, 1993, went to graduate school  
Shannon Beyale, summer 1993 - cooperative program with Navajo Community  
College- Science Honors program, currently in graduate school at UNM HSC  
Jason Thomas, 1993, graduating, BS Biology, UA Anchorage, 2003  
Don Benn, 1993 to 1995, PhD student at NMSU  
Happy Carmona, 1992, MD from UNM HSC  
Dolores Martinez, 1992  
Alex Ortega, 1992, MD  
April Sherard, 1991  
Harriet Yazzie, 1990-1991  
Rina Maldonado, 1990-1992, MD from UNM  
Melanie Gonzales, 1991  
Darian Lockwood, 1990, working in Albuquerque

**Classroom teaching:**

Spring 2006 Biology: Discovery and Innovation  
Fall 2006 Genomes and Genomic Analysis  
Spring 2006 Biomedical Research seminar  
Fall 2005 Genomes and Genomic Analysis  
    Genomics and Proteomics Seminar  
    Applying for graduate school seminar (IMSD)  
Fall 2004/2005 Genomes and Genomic Analysis  
    Genomics and Proteomics Seminar  
Fall/Spr 2002-2003, Sabbatical  
Spr 2002, Intro Cell Biology (200 students)  
Fall 2001 Genomes and Genomic Analysis, Biology 444/544 (11 students)  
Spr 2001, Genomes and Genomic Analysis, Biology 444/544 (15 students)  
Fall 2000 Genomes and Genomic Analysis, Biology 444/544 (19 students)  
Spr 2000 Regulation of Gene Expression (20 students)  
Fall 1999 Introduction to Cell Biology (250 students)  
Spr 1998 Gene Expression, 402 (20 students)  
Fall 1997 Molecular Biology, Biol 444 (25 students)  
Spr 1997 Introduction to Cell biology (230 students)  
Fall 1996 Molecular Biology (Analytical class for seniors and graduate students)  
Fall 1995 –Spring 1996 – Sabbatical

**Service:**

Memberships in Professional Societies and Organizations:  
American Society for Microbiology

Genetics Society of America  
American Association for the Advancement of Science  
American Society for Cell Biology  
Society for the Advancement of Chicanos and Native Americans in the Sciences (SACNAS)

Professional Service:

Elected positions:

1995-1998 Board of Directors - Society for the Advancement of Chicanos and Native Americans in the Sciences

Panels, Committees, and National meetings:

2006 Organize SACNAS workshop and Genome Reception

2005 - present NIH-NIGMS MORE advisory council

2004-2005 SACNAS program committee

2005-2006 Chair SACNAS genomics committee (Genome Scholars Program)

2004 Workshop on mentoring, PAESMEM award symposium

2004 SACNAS program committee

2003 reviewer for Sandia National Laboratories, LDRD research proposals

2002- present Faculty of 1000, Biomed Central reviewing committee

2003 SACNAS national meeting, local organizing committee, chair

2003 Informal panel to evaluate staff diversification, Pacific Northwest National Laboratory

2003 – 2004 National advisory panel, Long-Term Ecological Research Program, NSF

2003 co-author of training grant for genomics through SACNAS

2003 NSF Minority Post Doctoral Fellowship panel

2002 - 2007 – NIH-NHGRI Genome Research Review Committee

2001 Zeta Phi Beta meeting, Genomics and the impact on minority communities; Atlanta  
SACNAS – organizer of genomics symposium; Phoenix  
Genome Sequencing and Analysis Conference- Moderator-Biotechnology symposium

2000 AAAS Review of Maine COBRE proposals in genomics

NSF Wood's Hole meeting on Microbial Genomics

AAAS Review committee for EPSCoR Genomics proposal, Alaska EPSCoR

Zeta Phi Beta – minorities and the human genome project; Philadelphia

1999 Coordinator/author- report on federal investment in microbial genetics, Biotech Committee, NSTC

Zeta Phi Beta – organizational meeting – minorities and genomics; New Orleans

1997 -2000 CEOSE advisory committee to Neal Lane, director of NSF

1995-1997 Howard Hughes Predoctoral Fellowship Committee; Washington, DC; Feb.

1996 Organizer of the national Yeast Genetics Meeting in Madison, WI (Genetics Society of America)

Moderator/organizer of "Careers in Science" workshop, Yeast Genetics Meeting, Madison, WI.

1995-1996 Organizer, SACNAS meeting.

1995 Howard Hughes Predoctoral Fellowship Committee; Washington, DC; Feb.

1994 Organizer of the national Yeast Genetics Meeting in Seattle (Genetics Society of America)

Moderator of "Cell Cycle" workshop at national Yeast Genetics Meeting

1993 to 1994 Member NSF Cell Biology Panel, Washington, DC

Reviews for Journals and government agencies (approximately 5 per year):

Nucleic Acids Research  
Genes & Development  
Gene  
Molecular Microbiology  
EMBO J  
Journal of Bacteriology  
Genetics  
Molecular and Cellular Biology  
Experimental Cell Research  
International Journal of Hyperthermia  
Journal of Cancer Research  
Trends in Microbiology  
National Science Foundation and National Institutes of Health (National Human Genome Research Institute)

Departmental service:

2005-2006 PI UNM-Initiatives to Maximize Student Diversity (approximately 20 undergraduates, 5 graduate students, 4 staff – program to support research experiences for pre-PhD students)  
Brought in Debbie Nickerson, distinguished speaker from UWA, Seattle

2004-2005  
Graduate selection committee  
Faculty Advisor, Genomics Seminar Series  
Organized summer research symposium

2003-2004  
Lecturer III hiring committee chair  
Salary committee  
Space committee

2002-2003  
Sabbatical  
School of Engineering, Faculty Diversity Committee  
Remodel genomics facility  
Obtained \$60K in funding for this remodel

2001-2002  
Graduate policy committee

2000-2001  
Graduate policy committee  
Set up microarray facility – computers, arrayers, etc.  
Molecular microbial ecology search committee  
Organizer, first joint CS/Bio seminar

1999-2000  
Executive committee, Biology department (elected position)  
Chair, Physiology search committee  
Organizer, Friday noon seminar series

1997-1998  
Vice Chair, Biology  
Help manage the *Neurospora* Genome Project/RIMI lab/students – *Neurospora* genome project

- Undergraduate recruitment coordinator – supervisor for Carol Brandt  
Chair, Developmental Biology search committee  
Departmental salary committee  
Undergraduate policy committee
- 1995-1996 (sabbatical year)
  - Coordinate Navajo Community College Math Demonstration Day
  - Undergraduate recruitment coordinator – supervisor for Carol Brandt
- 1995
  - Graduate Admissions committee
  - Graduate Review Committee
  - Co-chair, Biology Science and Technology Building Committee
  - Host visits by Rep. Ray Sanchez and Senator Manny Aragon to the Biology Department
  - Manage RIMI lab (until Sept, 1995)
  - Oversee Biology Graduate Student Recruitment by Carol Brandt (student specialist in Biology)
  - Faculty mentor: RIMI-sponsored Biology-Buddy Program (74 students)
- 1995
  - Student support that I provided through RIMI grant:
    - Supported 7 students in 7 laboratories in Biology
    - Supported 15 students, 3 faculty, and 3 staff to attend SACNAS meeting
    - Supported 12 students to attend Biology Research Day from Navajo Community College in Shiprock
- 1994
  - Manage RIMI lab, including study groups, invited speakers, sponsoring visiting students and students' research presentations at meetings.
  - Supervisor for Carol Brandt – undergraduate recruitment and retention
  - Faculty advisor for 9 students at the SACNAS meetings in Chicago.
  - Graduate Review Committee: Biology
  - Graduate Admissions committee
  - MBRS Grant Committee
  - Graduate student recruitment in NM, AZ, and CO
  - Host Navajo Community College Science Honors Program-UNM Biology/Math Day
  - Supported 14 students to attend Biology Research Day from Navajo Community College in Shiprock through RIMI grant
- 1993
  - Manage RIMI lab
  - Initiate new graduate and undergraduate minority student recruitment program – RIMI Award two Departmental Minority graduate stipends through RIMI program
  - Organize and coordinate study groups for one section of Biology 221-Genetics, run by RIMI- supported graduate students
  - Host Navajo Community College Science Honors Program-UNM Biology/Math Day
- 1992
  - Establish and manage NSF- Molecular Biology Facility in the Department
- 1989-1993
  - University of Wisconsin-UNM faculty exchange program

College service:

- 2005-2006 Organized Diversity in Research Advisory Committee
- 2005-2006 Committee on Undergraduate Research
- 2003 Dean's undergraduate research advisory panel
- 2000 Speaker, Dean's Advisory Committee, 4/00
- 1994 Panelist, Critical Mass in the Sciences presentation of Women's studies, 2/94
- 1993-1999 Minority Engineering, Math and Sciences A&S Advisory committee
- 1992-1994 Undergraduate Curriculum committee
- 1992 MARC scholarship selection committee - Dept. of Psychology
- 1990-1993 A&S Faculty Women's Caucus - steering committee
- 1989-1991 Faculty senate

University service:

- 2006 Model Organism Database seminar series, distinguished visitor (Bill Gelbart, Harvard)
- 2005 IMSD PI: take 23 students to SACNAS; contribute to graduate recruitment  
Environmental Scientist search for ORS
- 2005 Model Organism Database Workshops (2)
- 2005 Speaker in Graduate Mentoring Symposium – PeerGrad committee
- 2002-03 Faculty mentor for AISES (American Indian Science and Engineering Society)
- 2002 Organizer and speaker, UNM Genome Symposium
- 2001 Organize Genome workshops and SW-GABA Day of Talks
- 2000 Provost's committee on Diversity
- 1998 KNME "In Focus" March, 1998  
Research Office grant panel  
Keynote speaker, Centennial Library 10th anniversary party  
[http://biology.unm.edu/biology/maggieww/Public\\_Html/Library.html](http://biology.unm.edu/biology/maggieww/Public_Html/Library.html)
- 1997 A&S Dean's search  
Regent's scholar mentor for 2 students  
MBRS Advisory Board
- 1996 A&S Dean's search committee  
Subject of 45 sec. promotional video for University Public Affairs  
Regent's scholar mentor for 3 students  
MIRT and MBRS advisory committees  
Native American Studies director, search committee
- 1995 Advisory panel and faculty advisor (1 month in Mexico); MIRT program; Dept. of Biochemistry;
- 1994-1999 Advisory board for DOE-sponsored MEMS (Minorities in Math, Engineering, and the Sciences)
- 1994-1995 Medical School Minority Programs Advisory Panel; Office of Cultural and Ethnic Programs
- 1994 Graduate student convocation committee  
Assist with undergraduate recruitment  
Medical School Minority Programs Advisory Panel
- 1993 Medical School Biomedical Research Planning Committee  
Assisted with New-Faculty Orientation  
Participant in KNME Video "In Search of Funding"  
Regent's Scholarship Selection Committee
- 1992-1995 Regent's Scholar mentor
- 1991 Assist with Diversity Session - TARC program

- 1990 One-on-one program - mentoring 2 Native American, freshman women
- 1989 New Mexico Plan Committee (developing a plan for campus diversity)

Community service:

- 2004-2005 mentor to high school students
  - Made DVD of PBS show done in 1998, for distribution
  - Organize Parent participation in summer research symposium
  - MBRS outreach to former MBRS and IMSD students
- 2003 Judge, AISES science fair
  - work to obtain funding for Gathering of Cancer Support group (cancer education and support group development for U.S. tribes) from Santo Domingo pueblo
- 2002 mentor to numerous high school students
- 2001 Help teachers with science fair projects
  - Speak at various luncheons and community meetings about genomics
- 2000 Numerous talks and presentations about genomics
  - Newspaper articles about genomics and opportunities for New Mexico
- 1999-2001 Director: Southwest Genomics and Biotechnology Alliance (170 researchers)
- 1998 Keynote speaker, 3rd Annual Undergraduate Research and Creative Arts Symposium
  - Cell Biology class, Bandelier elementary, 5<sup>th</sup> grade
- 1996 Science fair judge, Menaul school and regional science fair
  - Classroom teacher, 3rd grade, cell biology at Bandelier School
- 1988-1995 Ad hoc advisement of numerous (50-80) undergraduate women and minorities
- 1995 Speaker: Nancy Floyd Hayworth symposium on Breast Cancer; St. Joseph's Hospital
- 1994 Advisor for high school science fair project- Kim Butler
  - Taught 5th grade science class at Bandelier elementary
  - Moderator at "Chicanas in the Sciences" a presentation by Hispanic Student Services
- 1993 Sent letter to all high school science fair participants in Biology,
  - providing information about the Biology Department
- 1991-1992 Advisor for high school student science fair project, Paul Melendres -
  - 1<sup>st</sup> in State Science Fair both years, 1st and 3rd at International Science Fair