ALAN T. BAKALINSKY

EDUCATION

Ph.D. Microbiology, UC Davis, 1989
Thesis: "Conversion of wine yeast strains of *Saccharomyces cerevisiae* to heterothallism and determination of their chromosomal constitution"

M.S. Food Science (specialization in enology), UC Davis, 1983
Thesis: "The study of an immobilized acid protease for the treatment of wine proteins"

B.S. Fermentation Science, UC Davis, 1979

PROFESSIONAL EXPERIENCE

2010 – present	Adjunct Associate Professor, Dept of Biochemistry/Biophysics, Oregon State University (OSU)
1995 – present	Associate Professor, Dept of Food Science and Technology, OSU
1995 – present	Adjunct Associate Professor, Dept of Microbiology, OSU
1989 – 1995	Assistant Professor, Dept of Food Science and Technology, OSU
1992 – 1995	Adjunct Assistant Professor, Dept of Microbiology, OSU
1987 – 1989	Associate-Instructor, Genetics Dept, UC Davis
1983 – 1986	Teaching/Research Assistant, Dept of Enology and Viticulture; Genetics Department; Dept of Bacteriology; UC Davis

Affiliations with other academic programs at OSU

1998 – present	Bioresource Research, an undergraduate program
1992 – present	Molecular and Cellular Biology Graduate Program
1989 – 2010	Genetics Graduate Program

PROFESSIONAL MEMBERSHIPS

- American Association for the Advancement of Science
- American Society for Enology and Viticulture
- American Society for Microbiology

TEACHING, ADVISING AND RESEARCH

Credit Courses

Course	Title	Credits	Enrollment	Quarter, year
FST 385	*Writing course (WIC)* co-taught with D. Smith and J. Osborne	3	30	W15

FST 273	*Wine in the Western World*	3	200-215	Spr09, F09, Spr10-13, W14-15
GEN 501	*Independent Research: screen for oxalate-sensitive yeast mutants*	5	1	Spr05
FST 466/566	*Wine Production Principles* (with J. Kennedy)	3	21-33	Spr04-07
FST 505	*Special topics: yeast study*	3	1	Spr04
BIOE 490	*Senior Project: Bridgeport Brewing yeast disposal study* (served as expert advisor)	2	1	W04, Spr04
FST 467	*Wine Production and Analysis* (with J. Kennedy and M. Daeschel)	2	9-20	F04-06
MCB/GEN 555	*Genome Expression and Regulation* (with 5 other instructors; named changed from Eukaryotic Molecular Genetics in 07)	4	17-28	W01-12
FST 465/565	*Science of Winemaking* (with B. Watson from 97-02; with B. Watson and J. Kennedy in 03)	5	12-22	Spr97-03
FST 480	*Topics in Fermentation: food additives, alcohol and health* (with M. Daeschel), *food additives, lignocellulosic biomass* (with M. Penner), *profiles in winemaking, profiles in winemaking, physiology of yeast fermentation, yeast vitality*	1, 2, 1, 3, 1, 1	12-42	W98, Spr99, W00, F01, W05, W07, W11, Spr15
FST 401	*Independent Research: yeast study*	1	1	Spr96, W10
FST 405	*Special Topics: wine and winemaking, writing*	1	1-2	Spr96, Spr07, Sum07

FST 251	*Wine, Beer, Spirits* (with M. Daeschel and B. Watson from 95-00; with B. Watson and J. Clawson in 01; with B. Watson and T. Shellhammer in 02-03; with T. Shellhammer et al. in 04-05)	3	35-124	F95-05
FST 501	*Independent Research: genetic engineering, yeast physiology, yeast studies, chemical deglycosylation of proteins*	1 or 2	1-3	F03, W04, Spr04, Spr07
FST/MB 479/579	*Fermentation Microbiology* (with B. Geller in 1999; cross-listed with MB starting in 1999; name changed from Food Biotechnology to Fermentation Microbiology in 2007; taught as FST 405 in W07)	3	15-93	W97-08; Spr08-15
FST 507	Graduate Seminar	1	9-13	W96, W01, 05, 12

Course	**Title**	**Credits**	**Enrollment**	**Quarter, year**
FST 401	*Independent Research: cherry brine fermentation*	4	1	W95
FST 505	*Special Topics: cloning of yeast gene conferring sulfite protection*	3, 1	1-3	W94, Sum95
FST 333	*Science of Winemaking* (with B. Watson)	3	17-20	Spr93-95
FST 501	*Independent Research: genetic engineering, yeast physiology*	1 or 2	1-3	Spr93, Sum95
FST 479/579	*Food Biotechnology*	3	3-8	W92-5
FST 401	*Independent Research*	2	1	Spr92
FST 507	*Graduate Seminar*	1	17	Spr91
FST 407	*Special Topics: electrophoretic*	2	1	F90

	karyotypes of yeast			
FST 505	*Special topics: acid proteases, isolation of sulfite mutants, reading & conference*	3, 6	1	F89, 90
FST 210	*Food Processing*	3	11-25	F89-91
FST 211	*Food Processing Laboratory*	1	12-24	F89-91

Invited Lecturer for the Following Credit Courses

Course	**Title**	**# Lectures**	**Quarter, Year**
WSE 111	Renewable materials for a green planet	1	W16
WSE 415	Renewable materials in the modern age	1 (cork)	F15
CHE 507	Chem, Biol, Env Eng Seminar	1 x 1 h	W13
FST 466	Wine Production Principles	1 x 1.5 h	W10
BI 399	Genetics Laboratory	2 x 1 h	W10
FST 480	Renewable energy	1 x 1.5 h	Spr09
FST 260	FST in Western Culture	1 x 1.5 h	F07
CSS 199/FST 199	Issues in Sustainable Ag	1 x 1 h	W07
FST 360	Food Safety	1 x 1 h	Spr04-08
FST 421	Food Law	1 x 1 h	F03, 06, 12
FS 499/BI 399	Issues in Ag & Nat Res Biotech	1 x 1 h	F00
MB 110	Orientation to Microbiology	1 x 1 h	W00
MB 440/540	Food Microbiology	1 x 1.5 h	F96
FST 407	Senior Seminar	1 x 1 h	F97, 99, W00
FST 102	Maraschino Cherry	1 x 1 h	W97-02, 06
MCB 511	Research Perspectives	1 x 1.5 h	F96, 05

Course			
MCB 511	Research Perspectives	1 x 1.5 h	F93, 94
FST 423	Food Analysis	1 x 1 h	W93
FST 210	Food Processing	1-2 x 1 h	F92, 94, 95
FST 250X	Fermented Foods of the World	2-3 x 1 h	F92, 94
FST 423	Food Analysis	1 x 1 h	W93
FST 102	Survey of Food Science	1 x 1 h	W90-93
FST 250X	Fermented Foods of the World	2-3 x 1 h	F92, 94
MCB 556	Molecular & Cellular Biology	1-3 x 1.5 h	Spr92, 93
AC 460/560	Biotechnology Perspectives	2 x 1.5 h	Spr91

Major Professor for Graduate Students

Student	Program	Graduation	Thesis Topic
Garrett Holzwarth	Ph.D. (Micro)	In progress	Yeast sulfite production
Jun Ding	Ph.D. (Biochem)	2014	Yeast acetate resistance
Mark Smith	M.S. (FST)	2010	Assay for red wine proteins
Jeff Rowe	M.S. (FST)	2008	Fate of wine proteins during aging on yeast lees
Severino Zara	Ph.D. (Micro) at Univ of Sassari; co-advised with M. Budroni	2000	Wine yeast biofilm
Hoon Park	Ph.D. (FST)	1999	Yeast sulfite metabolism
N.R. Sudarshan	Ph.D. (FST)	1996	Antimutagenicity of yogurt
Dorina Avram	Ph.D. (Genetics)	1997	Genetics of sulfite resistance

Student	Program	Status	Thesis Topic
Hong Xu	M.S. (Genetics)	1995	Grape rootstock fingerprinting
Soren Nordmark	M.S. (FST); co-advised with M. Penner	1993	Cellulase assay development
Jolynne Wightman	M.S. (FST)	1992	Study of yeast sulfite mutants
Xiao Xu	M.Ag.	1990	Isolation of sulfite mutants

Service on Graduate Student Committees

Student	Program	Status	Advisor	My Role
Ting Luo	Ph.D. (FST)	Pending	N. Shay	Member
Daniel Kraft	M.S. (FST)	2015	J. Osborne	Member
Bingxin Zhao	M.S. (FST)	2014	N. Shay	Member
Margo Keller	M.S. (Micro)	2014	B. Geller	Member
Jing Sun	Ph.D. (MCB)	2014	S. Giovannoni	GCR*
Yunhan Duan	M.S. (Zoology)	2013	D. Zhang	GCR
Jay Kirkwood	Ph.D. (Pharm)	2013	F. Stevens	GCR
Pathima Udompijitkul	Ph.D. (Micro)	2013	M. Sarker	Member
Lisa Truong	Ph.D. (EMT)	2012	R. Tanguay	Member
Harper Hall	M.S. (FST)	2012	J. Osborne	Member
Kevin Reilly	M.S. (MCB)	2011	T. Mockler	Member
Juan Muniz	Ph.D. (EMT)	2010	G. Kisby	GCR
Lucas Quarles	M.S. (EMT)	2009	K. Anderson	GCR
Stefanie Nguyen	M.S. (FST)	2008	M. Penner	Member
Santiago Perez	Ph.D. (Zoology)	2007	V. Weiss	GCR
Pathima Udompijitkul	M.S. (FST)	2007	Zhao/Daeschel	Member
Minjung Chae	M.S. (FST)	2007	Y.-C. Su	Member
Samradhni Jha	M.S. (Vet Sci)	2006	L. Bermudez	GCR
Young-Shin Park	Ph.D. (Scienc Ed)	2005	L. Flick	GCR

Erin Martin	Ph.D. (Botany)	2005	B. McCune	GCR
Omar Sabry	Ph.D. (Med Chem)	2004	W. Gerwick	GCR
Abdullah Al-Assaf	Ph.D. (Nutrition)	2003	J. Leklem	GCR
Yeonjin Veach	M.S. (Hort.)	2002	M. Mok	GCR
Ahmet Koc	Ph.D. (Genetics)	2002	G. Merrill	Member
Ray Shaffer	M.S. (Horticulture)	2002	C. Vasconcelos	Member
Magalie Rosemond	M.S. (Toxicology)	2002	L. Curtis	GCR
Bryan Ford	Ph.D. (Toxicology)	2001	G. Bailey	Member
Scott Blackwood	M.S. (Entomology)	2000	B. Croft	GCR
Jenny Gavilanez	M.S. (Entomology)	2000	M. Burgett	GCR
Jie Yang	M.S. (FST)	1999	J.A. Torres	Member
Amy Smoker	M.S. (Micro)	1998	W. Sandine	Member
John Fenske	M.S. (FST)	1998	M. Penner	Member
Eric Knoshaug	M.S. (Micro)	1998	J. Trempey	Member
Eric Groth	M.S. (Entomology)	1997	R. Berry	GCR
Yun-Chin Chung	Ph.D. (FST)	1996	M. Penner	Member
Djuhartini Tandjo	M.S. (FST)	1996	M. Penner	Member
Usicha Tantasucharit	M.S. (FST)	1995	M. Penner	Member
Sooyoun Kim	M.S. (FST)	1994	M. Penner	Member
Philippe Georgel	Ph.D. (Biochem)	1993	K. van Holde	GCR
Xintian Ming	Ph.D. (FST)	1993	M. Daeschel	Member
Brian Russell	M.S. (Genetics)	1993	D. Mills	Member
Jincan Guo	Ph.D. (Biochem)	1992	S. Gould	GCR
Carlos Kantt	M.S. (FST)	1991	J.A. Torres	Member
A. Abdel-Esquivel	M.S. (Plant Phys)	1990	D. Armstrong	GCR

*Graduate Council Representative

Service on Honors College (Undergraduate) Thesis Committees

Student	Degree	Graduation	Project	My Role
Van Anh Vu	B.S. (Health Sciences)	pending	Gadusol production in yeast	Major professor
Jack Brosy	B.S. (Biochem)	2015	Renewable biodiesel from yeast	Major professor
Tyler Montgomery	B.S. (Biol)	2013	Yeast acetic acid resistance	Major professor
Molly Zook	B.S (FST)	2011	Wine microflora	Committee member

Undergraduates and Visiting Graduate Students Whom I Mentored

Student	Major	When?	Project	Where now?
E Seul Kim	B.S.	Spr15-	Gadusol production in	

"Elizabeth"	(Microbiology)		yeast	
Ana Laura Pereira Lourenco	(Biotech, Univ Brazilia	May-Jul 2015	Gadusol production in yeast	
Van Anh Vu	B.S. (General Science)	7/14-present	Gadusol production in yeast	
Jack Brosy	B.S. (Biochem)	3/12-6/14	Renewable biodiesel from yeast	
Allie Halsted	B.S. (Microbiol)	1/14-present	Acetic acid resistance in yeast	
Allen Yoshinaga	B.S. (Microbiol)	9/13-present	Acetic acid resistance	
Vinny Tan	B.S. (Microbiol)	12/12-6/13	Acetic acid resistance	lab technician, Medolac labs
Garrett Holzwarth	B.S. (Microbiol)	6/12-3/13	Acetic acid resistance	Ph.D. student, Microbiology OSU
Tyler Montgomery	B.S. (Biology)	6/11-1/13	Acetic acid resistance	
Virginia Usher	B.S. (FST)	6/11-8/11	Acetic acid resistance	
Jan Bierma	B.S. (Biochem)	4/10-6/12	Acetic acid resistance	Ph.D. student, UC Irvine '14
Mallori Jirikovic	B.S (Chem Eng)	6/09-6/10	Acetic acid resistance	Med school OHSU '14
Matthew Boenzli	B.S. (Biology)	9/08-6/09	Toxicity of nanogold particles	
Vihangi Hindagolla	B.S. (Biochem)	1/07-12/08	Fullerene toxicity	Med school OHSU '14
Alex Hadduck	B.S. (Biochem)	6/07-12/08	Fullerene toxicity	Law School UC SF '16
Vicky Cheng	B.S. (Biochem)	6/05-4/07	Oxalate toxicity	
Claire Menneteau	B.S. (FST—Univ of Dijon, France)	3/04-10/04	Yeast mannoproteins	Winemaker, France '14
Tin Le	B.S. (Biochem)	4/02-6/03	Wine yeast biofilm	Dentist, Portland, OR '16
Olga Martin Chira	B.S. (Microbiol)	3/00-6/00	Arginine metabolism	Pharmacist, OR '14
Nathan Lopez	B.S. (Microbiol)	4/98-3/99	Sulfite resistance	Senior Faculty Research Assist '14

Student	**Program**	**When?**	**Project**	**Where now?**
Tiana Tran	Corvallis	1995	Yeast genetics	

	High School			
Yasuko Uemura	B.S. (FST)	1/94-6/94	Yeast chromosome electrophoresis	
Chantal Matar	Ph.D. (FST—Laval Univ, Canada	Summer 1994	Antimutagenicity of yogurt	Professor, U Ottawa, Canada
Thao Pham	B.S. (Biochem)	1/93-4/93	Yeast sulfite mutants	
Diane Wilson	B.S. (Gen Sci)	3/92-6/92	Grape DNA fingerprinting	Physician, Spokane WA

Host for Visiting Professor

Dr. Severino Zara Summer 2010
Dr. Lin Zhou 1995-1997

International Teaching

OSU Exploring World Agriculture field trip to Italy
Organized 18-day itinerary for 17 undergraduates in College of Ag Sci that provided opportunities to visit Italian sites of agricultural, historic and cultural interest in 3 geographic areas—Veneto, Sardinia, and Rome. Co-led group with College of Ag Sci colleague, Dr. Giovanna Rosenlicht. Sept 2-20, 2012.

Adjunct Professor in Ph.D. Program in Microbial Biotechnology, University of Sassari, Sassari, Italy. This appointment formalizes opportunities to mentor visiting Ph.D. students from Sassari. 2011 to present.

Invited Professor for special course at Conegliano campus of the University of Padova, Italy: Advances in Viticulture and Enology, cycle III-enology; a 2-week course for Italian enology students taught by invited international experts. Gave talks on the "Oregon wine industry", "Overview of the US wine industry", "Flor yeast physiology", "Advances in wine protein analysis", participated in course discussions and field trips to regional wine producers (Veneto and Alto Adige areas) and research centers. October, 2010.

Rome Study Abroad Program. Taught in the Rome Study Abroad Program (University of New Mexico-OSU collaboration). As a requirement for inclusion in the program, FST 273 was approved by University of New Mexico as an offering within their Honors Program (UHON 221) and was retitled "Legacy of Wine in the Western World". Sept to Nov, 2009.

Masters program in Agricultural and Veterinary Biotechnology, University of Sassari, Italy. Presented ten 1-hr lectures on yeast: history of yeast research; life cycle and genome; making and analyzing mutants; molecular genetics; DNA

and protein microarrays; and a 1-hr lecture on writing scientific papers, Nov 2000 –Jan 2001.

SCHOLARSHIP AND CREATIVE ACTIVITY

1. Peer-Reviewed Publications

(An asterisk indicates student or post-doctoral scientist whom I mentored.)

40. *Ding, J. *Holzwarth, G., Bradford, S., Cooley, B., *Yoshinaga, A.S., Patton-Vogt, J., Abeliovich, H., Penner, M.H., **Bakalinsky**, A.T. (2015). *PEP3* overexpression shortens lag phase but does not alter growth rate in *Saccharomyces cerevisiae* exposed to acid stress. Appl. Micro. Biotech. 99:8667-8680; doi:10.1007/s00253-015-6708-9.
39. Osborn, R.A., Almabruk, K.H., *Holzwarth, G., Asamizu, S., LaDu, J., Kean, K., Karplus, P.A., Tanguay, R.L., **Bakalinsky**, A.T., Mahmud, T. (2015). *De novo* synthesis of a sunscreen compound in vertebrates. eLife 2015;4:e05919.
38. *Ding, J., *Holzwarth, G, Penner, M.H., Patton-Vogt, J., **Bakalinsky**, A.T. (2015). Overexpression of acetyl-CoA synthetase in *Saccharomyces cerevisiae* increases acetic acid tolerance. FEMS Micro. Lett. 362:1-7.
37. Vincenzi, S., *Bierma, J., Wickramasekara, S.I., Curioni, A., **Bakalinsky**, A.T. (2014) Characterization of a grape class IV chitinase. J. Ag. Food Chem. 62: 5660–5668
36. Ding, J., *Bierma, J., Smith, M.R., Poliner, E., Wolfe, C., *Hadduck, A.N., Zara, S., *Jirikovic, M., van Zee, K., Penner, M.H., Patton-Vogt, J., **Bakalinsky**, A.T. (2013) Acetic acid inhibits nutrient uptake in Saccharomyces cerevisiae: auxotrophy confounds the use of yeast deletion libraries for strain improvement. Appl. Micro. Biotech. 97:7405-7416.
35. *Smith, M.R., *Boenzli, M.G., *Hindagolla, V., *Ding, J., Miller, J.M., Hutchison, J.E., Greenwood, J.A., Abeliovich, H., **Bakalinsky**, A.T. (2013) Identification of gold nanoparticle-resistant mutants of *Saccharomyces cerevisiae* suggests a role for respiratory metabolism in mediating toxicity. Appl. Env. Micro. 79:728-733.
34. *Smith, M.R., Penner, M.H., Bennett, S.E., **Bakalinsky**, A.T. (2011) A quantitative colorimetric assay for total protein applied to the red wine Pinot noir. J. Ag. Food Chem. 59:6871-6876.
33. *Hadduck, A.N., *Hindagolla, V., Contreras, A., Li, Q., **Bakalinsky**, A.T. (2010) Does aqueous fullerene inhibit growth of yeast or *E. coli*? Appl. Env. Micro.76:8239-8242.
32. *Zara, S., Gross, M.K., Zara, G., Budroni, M., **Bakalinsky**, A.T. (2010) Ethanol-independent biofilm formation by a flor wine yeast. Appl. Env. Micro. 76:4089-4091.
31. *Rowe, J.D, Harbertson, J.F., Osborne, J.P., Freitag, M., Lim, J., **Bakalinsky**, A.T. (2010) Systematic identification of yeast proteins extracted into model wine during aging on the yeast lees. J. Ag. Food Chem. 58:2337-2346.
30. Winter, G., Hazan, R., **Bakalinsky**, A.T., Abeliovich, H. (2008) Caffeine induces macroautophagy and confers a cytocidal effect on food spoilage yeast in combination with benzoic acid. Autophagy 4:1-9.

29. *Cheng, V., Stotz, H.U., Hippchen, K., **Bakalinsky**, A.T. (2007) Genome-wide screen for oxalate-sensitive mutants of *Saccharomyces cerevisiae*. Appl. Env. Micro. 73:5919-5927.
28. Nordmark T.S., **Bakalinsky** A.T., Penner M.H. (2007) Measuring cellulase activity: application of the filter paper assay to low activity enzyme preparations. Appl. Biochem. Biotech. 136-140:131-139.
27. Chung, Y.-C., **Bakalinsky**, A., and Penner, M.H. (2005) Enzymatic saccharification and fermentation of xylose-optimized dilute acid-treated lignocellulosics. Appl. Biochem. Biotech. 121-124:947-962.
26. *Zara, S., **Bakalinsky**, A.T., Zara, G., Pirino, G., Demontis, M.A., Budroni, M. (2005) *FLO11*-based model for air-liquid interfacial biofilm formation by *Saccharomyces cerevisiae*. Appl. Env. Micro. 71:2934-2939.
25. *Park, H. and **Bakalinsky**, A.T. 2004. Evidence for sulfite proton symport in *Saccharomyces cerevisiae*. J. Micro. Biotech. 14:967-971.
24. *Martin, O., Brandriss, M.C., Schneider, G., and **Bakalinsky**, A.T. (2003) Improved anaerobic use of arginine by *S. cerevisiae*. Appl. Env. Micro. 63:1623-1628.
23. *Zara, S., Farris, G.A., Budroni, M., and **Bakalinsky**, A.T. (2002) *HSP12* is essential for biofilm formation by a Sardinian sherry strain of *S. cerevisiae*. Yeast 19:269-276.
22. *Park, H. and **Bakalinsky**, A.T. (2000) *SSU1* mediates sulfite efflux in *S. cerevisiae*. Yeast 16:881-888.
21. *Park, H., *Lopez, N.I., and **Bakalinsky**, A.T. (1999) Use of sulfite resistance in *S. cerevisiae* as a dominant selectable marker. Curr. Genet. 36:339-344.
20. Wollowski, I., Ji, S.-T., **Bakalinsky**, A.T., Neudecker, C., and Pool-Zobel, B.L. (1999) Bacteria used for the production of yogurt inactivate carcinogens and prevent DNA damage in the colon of rats. J. Nutr. 129:77-82.
19. *Avram, D., Leid, M., and **Bakalinsky**, A.T. (1999) Fzf1p of *S. cerevisiae* is a positive regulator of *SSU1* transcription and its first zinc finger region is required for DNA binding. Yeast. 15:473-480.
18. *Nadathur, S.R., *Zhou, L., Lowry, R.R., and **Bakalinsky**, A.T. (1997) Effects of hydrolysis of milk glycerides on the antimutagenicity of a hexane extract of milk**.** J. Dairy Sci. 81:664-671.
17. *Matar, C., *Nadathur, S.R., **Bakalinsky**, A.T., and Goulet, J. (1997) Antimutagenic effects of milk fermented by *Lactobacillus helveticus* L89 and a protease-deficient derivative. J. Dairy Sci. 80:1965-1970.
16. *Avram, D. and **Bakalinsky**, A.T. (1997) *SSU1* encodes a plasma membrane protein with a central role in a network of proteins conferring sulfite tolerance in *S. cerevisiae*. J. Bact. 179:5971-5974.
15. *Park, H. and **Bakalinsky**, A.T. (1997) Ethanol production from spent cherry brine. J. Ind. Micro. Biotech. 19:12-17.
14. Chung, Y.-C., **Bakalinsky**, A., and Penner, M.H. (1997) Analysis of biomass cellulose in simultaneous saccharification and fermentation processes. Appl. Biochem. Biotech. 66:249-262.
13. *Avram, D. and **Bakalinsky**, A.T. (1996) Multicopy *FZF1* (*SUL1*) suppresses the sulfite sensitivity but not the glucose derepression or aberrant cell morphology of a *GRR1* mutant of *Saccharomyces cerevisiae*. Genetics 144:511-521.

12. *Xu, H. and **Bakalinsky**, A.T. (1996) Identification of grape (*Vitis*) rootstocks using sequence-characterized-amplified-region DNA markers. HortSci. 31:267-268.
11. *Nadathur, S. Carney, J.R., Gould, S.J., and **Bakalinsky**, A.T. (1996) Palmitic acid is the major fatty acid responsible for significant anti-MNNG activity in yogurt. Mutation Res. 359:179-189.
10. **Bakalinsky**, A.T., *Nadathur, S.R., Carney, J.R, and Gould, S.J. Antimutagenicity of yogurt. (1996) Mutation Res. 350:199-200.
9. *Xu, H., Wilson, D.J., Arulsekar, S., and **Bakalinsky**, A.T. (1995) Sequence-specific PCR markers derived from RAPD markers for fingerprinting grape (*Vitis*) rootstocks. J. Am. Soc. Hort. Sci. 120:714-720.
8. *Nadathur, S.R., Gould, S.J., and **Bakalinsky**, A.T. (1995) Antimutagenicity of an acetone extract of yogurt. Mutation Res. 334:213-224.
7. *Nadathur, S.R., Gould, S.J., and **Bakalinsky**, A.T. (1994) Antimutagenicity of fermented milk. J. Dairy Sci. 77:3287-3295.
6. *Xu, X., *Wightman, J.D., Geller, B.L., *Avram, D, and **Bakalinsky**, A.T. (1994) Isolation and characterization of sulfite mutants of *S. cerevisiae*. Curr. Genet. 25:488-496.
5. *Wightman, J., *Xu, X., Yorgey, B.M., Watson, B.T., McDaniel, M.R., Micheals, N.J., and **Bakalinsky**, A.T. (1992) Evaluation of genetically-modified wine strains of *Saccharomyces cerevisiae*. Amer. J. Enol. Vit. 43**:**283-289.
4. **Bakalinsky**, A. T. and Snow, R. (1990) The chromosomal constitution of wine strains of *Saccharomyces cerevisiae*. Yeast. 6**:**367-382.
3. **Bakalinsky**, A. T. and Snow, R. (1990) Conversion of homothallic wine strains of *Saccharomyces cerevisiae* to heterothallism. Appl. Env. Micro. 56**:**849-857.
2. **Bakalinsky**, A. T. and Boulton, R. (1985) The study of an immobilized acid protease for the treatment of wine proteins. Amer. J. Enol. Vit. 36:23-29.
1. Crowell, E. A., Ough, C. S., and **Bakalinsky**, A. (1985) Determination of alpha amino nitrogen in musts and wines by TNBS method. Amer. J. Enol. Vit. 36:175-177.

Presentations

Invited Papers (oral)
(An asterisk indicates students I mentored.)

29. *Holzwarth, G., Osborne, J.P., **Bakalinsky**, A.T. Can natural sulfite formation by wine yeasts substitute for sulfite additions disallowed in organic wine production? ASEV, Portland, OR, Jun 17, 2015. Poster and oral "flash talk".
28. **Bakalinsky**, A.T. Acetic acid toxicity and tolerance in the yeast *S. cerevisiae*, Dept of Biological Sciences, Duquesne Univ, Pittsburgh, PA, Apr 17, 2015.
27. **Bakalinsky**, A.T. Increasing acetic acid tolerance in *S. cerevisiae* for improved biofuel production from plant biomass, Hebrew University, Israel, Oct 13, 2013.
26. **Bakalinsky**, A.T. Increasing acetic acid tolerance in *S. cerevisiae* for improved biofuel production from plant biomass, University of Sassari, Italy, Oct 8, 2013.
25. **Bakalinsky**, A.T. Increasing acetic acid tolerance in *S. cerevisiae* for improved biofuel production from plant biomass, University of Padua, Italy, Oct 2, 2013.

24. **Bakalinsky**, A.T. Studying yeasts with Ralph and where it led me. Ralph Kunkee Seminar, ASEV, Portland, OR, Jun 22, 2012. Moderated "General Enology" session, June 21.
    General Enology session **moderator**, ASEV, Portland, OR, Jun 21, 2012.
23. **Bakalinsky**, A.T. Wine proteins—yeast contributions and detection in red wine. Program in Viticulture and Enology, Tricities campus, Richland, WSU, Mar 22, 2012.
22. **Bakalinsky**, A.T. In vivo detoxification of acetic acid by *Saccharomyces cerevisiae* for improving biofuel production. Department of Agricultural Biotechnology, University of Padua, Italy, Sept 20, 2011.
21. **Bakalinsky**, A.T. Biofilm formation by a flor wine strain of the yeast *S. cerevisiae*. Oregon Wine Research Institute, OSU, Mar 2, 2011.
20. **Bakalinsky**, A.T. Yeast proteins extracted into model wine and detection of protein in red wine, INRA, Montpellier, France, Nov 2, 2010.
19. *Smith, M.R., *Hadduck, A.N., *Hindagolla, V., *Boenzli, M.G., Contreras, A., Hutchison, J.E., Li, Q., **Bakalinsky**, A.T. Aqueous nC_{60} fullerene and positively-charged gold nanoparticles do not inhibit growth but affect survival of stationary phase yeast cells, EPA-sponsored Interagency Environmental Nanotechnology Grantees Workshop, Las Vegas, NV, Nov 9, 2009.
18. **Bakalinsky**, A.T. Mannoproteins are enriched in model wine aged 9 months on the yeast lees. Department of Agricultural Biotechnology, University of Padua, Italy, Oct 29, 2009.
17. *Smith, M., Hutchison, J., **Bakalinsky**, A.T. Discovery of genes that mediate toxicity of functionalized gold nano-particles, International Conference on the Environmental Implications and Applications of Nanotechnology, U. Mass, Amherst. MA, Jun 2009.
16. **Bakalinsky**, A.T. Genomics-based determination of nanoparticle toxicity: structure-function analysis, EPA-sponsored Interagency Environmental Nanotechnology Grantees Workshop, Tampa, FL, Nov 19-21, 2008.
15. *Rowe, J.D., Osborne, J.P., **Bakalinsky**, A.T. Kinetics of yeast protein release during aging of wine on the yeast lees. ASEV annual meeting, Portland, Jun 18, 2008.
14. *Hadduck, A., *Hindagolla, V., Xie, B., Bacalao, M.A., Li, Q., **Bakalinsky**, A.T. Assessing response to nC_{60} fullerene in *S. cerevisiae* and *E. coli*. ACS annual meeting, New Orleans, Apr 7, 2008.
13. **Bakalinsky**, A.T. Contributions of yeast mannoproteins to wine quality. International Wine Microbiology Symposium, Tenaya Lodge, Yosemite, April 4-5, 2006.
12. **Bakalinsky**, A.T. The yeast biofilm response to sugar depletion. Center for Biofilm Engineering, Montana State University, Bozeman, MT. Sep 12, 2002.
11. **Bakalinsky**, A.T. Improved anaerobic use of arginine by *S. cerevisiae*. NWASEV, Inn at Otter Crest, Jul 16, 2001.
10. **Bakalinsky**, A.T. Why are wine yeast resistant to sulfite? British Columbia Wine Institute Conference on Enology and Viticulture, Penticton, B.C., Canada, June 15-16, 2000.
9. **Bakalinsky**, A.T. Sulfite metabolism in the yeast *S. cerevisiae*--a genetic analysis. Department of Food Science and Technology, U.C. Davis, Feb. 2, 2000.

8. **Bakalinsky**, A.T. "Why are wine yeasts resistant to sulfite?" Burgundy-California-Oregon wine symposium, University of Dijon, France. 2000.
7. **Bakalinsky**, A.T. Sulfite metabolism in the yeast *S. cerevisiae*. Regional wine yeast meeting in the microbiology section, Dept. of Environ. Agric. Biotech. and Food Science, University of Sassari, Sardinia, Italy, Oct. 7, 1999.
6. **Bakalinsky**, A.T. Sulfite metabolism in the yeast *S. cerevisiae*. OSU Center for Gene Research and Biotechnology Annual Retreat, Newport, Oct. 1, 1999.
5. **Bakalinsky**, A.T. Sulfites, wine, and health, "Wine in context: nutrition, physiology, policy symposium", ASEV, June 24-25, 1996, Reno, NV.
4. **Bakalinsky**, A.T. Yeast, sulfur, cherries, and fuel alcohol. Invited talk for the annual OSU Center for Gene Research and Biotechnology Retreat, OSU, Sept. 30, 1995.
3. **Bakalinsky**, A.T., *****Nadathur, S.R., and Gould, S.J. Antimutagenicity of yogurt, 4th International Conference on Mechanisms of Anticarcinogenesis and Antimutagenesis, Banff, Canada, Sept 1994.
2. **Bakalinsky**, A.T., *****Nadathur, S.R., and Gould, S.J. Antimutagenicity of yogurt: implications for human health and colon cancer, National Yogurt Association meeting, Wash., D.C., Oct., 1993.
1. **Bakalinsky**, A.T., *****Nadathur, S.R., and Gould, S.J. Fermentation increases the antimutagenicity of milk, First Computer Conference on Lactic Acid Bacteria, Biofocus Foundation, Stockholm, Sweden, May 1993.

Other Presentations (presenter, contributing author, organizer; oral unless indicated as poster)

(An asterisk indicates students I mentored.)

77. Vincenzi, S., *Bierma, J., Wickramasekara, S.I., Curioni, A., Gazzola, D., **Bakalinsky**, A.T. Does grape chitinase inhibit yeast growth? Macrowine meeting, Stellenbosch, South Africa, Sept 7-10, 2014.
76. *Ding, J., Holzwarth, G., Bradford, S., Cooley, B., Yoshinaga, A., Patton-Vogt, J., Abeliovich, H., Penner, M.H., **Bakalinsky**, A.T. *PEP3* overexpression protects yeast from acid stress by promoting vacuolar biogenesis. Yeast Genetics Meeting, Seattle, WA Jul 29-Aug 3, 2014. Poster.
75. **Bakalinsky**, A.T. Increasing acetic acid tolerance in *S. cerevisiae* for improved biofuel production from plant biomass, OSU Dept of Food Science and Technology, Nov 18, 2013.
74. *Ding, J., *Bierma, J.C., *Smith, M.R., Poliner, E., Wolfe, C., Hadduck, A., Zara, S., Jirikovic, M., van Zee, K., Penner[1], M.H., Patton-Vogt, J., **Bakalinsky**, A.T. Acetic acid inhibits nutrient accumulation in *Saccharomyces cerevisiae*: auxotrophy confounds use of yeast deletion libraries for strain improvement. 35th Symp on Biotech for Fuels and Chemicals, Portland, OR, Apr 29-May 2, 2013. Poster.
73. **Bakalinsky**, A.T., Ding, J., Holzwarth, G. Renewable biofuels from lignocellulosic biomass—dealing with fermentation inhibitors. OSU Microbiology Dept, Mar 11, 2013. Oral.

72. *Ding, J., *Smith, M.R., Patton-Vogt, J., Penner, M.H., **Bakalinsky**, A.T. In vivo detoxification of acetic acid by *Saccharomyces cerevisaie* for improving biofuel production. National SunGrant Conference, New Orleans, LA, Oct 4, 2012. Oral.
71. *Ding, J., *Bierma, J., *Smith, M.R., Zara, S., *Hadduck, A., Poliner, E., *Jirikovic, M., Patton-Vogt, J., Penner, M.H., **Bakalinsky**, A.T. Does impaired endocytosis of nutrient transporters increase yeast tolerance for acetic acid? OSU Center for Genome Research and Biocomputing Conference, OSU, Sept 18, 2011. Poster.
70. *Smith, M.R., Penner, M.H., Bennett, S.E., **Bakalinsky**, A.T. Measurement of protein in Oregon Pinot noir. OSU Viticulture and Enology Research Colloquium, Feb 24, 2011.
69. *Smith, M.R., Penner, M.H., Bennett, S.E., **Bakalinsky**, A.T. Stability of yeast mannoproteins in Oregon Pinot noir wines. Pacific NW Center for Small Fruits Research Conference. Boise, ID, Dec 2, 2010.
68. Decorosi, F., **Bakalinsky**, A.T., Viti, C., Tatti, E., Zara, G., Zara, S. Analysis of metabolic profile of a flor yeast mutant of *Saccharomyces cerevisiae* by using phenotype microarray™ technology. 2nd Florence Conference on Phenotype Microarray Analysis of Microorganisms. Firenze-Italy, Sep 13-15, 2010. Poster.
67. *Rowe, J.D., Harbertson, J.F., Osborne, J.P., Freitag, M., Lim, J., **Bakalinsky**, A.T. Systematic identification of yeast proteins released into model wine during aging on the yeast lees. OSU Viticulture and Enology Research Colloquium, 11 Mar 2010. Oral.
66. *Zara, S., Gross, M.K., Budroni, M., Zara, G., **Bakalinsky**, A.T. Ethanol-independent air-liquid biofilm formation by a Sardenian wine yeast. Eurobiofilms 2009, 1st European Congress on Microbial Biofilms, Rome, Italy, 2-5 Sep 2009. Abstract.
65. *Smith, M.R., *Boenzli, M.R., Hutchison, J.E., **Bakalinsky**, A.T. Discovering genes that control cellular response to gold nanoparticles. Annual SNNI (Safer Nanotech & Nanomaterials Initiative—ONAMI program) conference, Invitrogen, Inc., Eugene, OR, Mar 2-3, 2009. Poster.
64. *Smith, M., **Bakalinsky**, A.T. Identifying genes mediating nanoparticle toxicity. CGRB Retreat, Redmond, OR, Oct. 4-5, 2008. Poster.
63. *Hadduck, A., *Hindagolla, V., Xie, B., Li, Q., **Bakalinsky**, A.T. Microbial response to nC_{60} fullerene. Micro Nano Breakthrough Conference, Vancouver, WA, 2008. Poster.
62. Stotz, H.U., **Bakalinsky**, A.T., Guo, X., Takahashi, H., Sasaki, E., Shimada, Y., Kamiya, Y. "Novel genetic models for analyzing interactions with *Sclerotinia sclerotiorum*". Aug 24-29, 2008. International Congress of Plant Pathology, Turin, Italy. Poster.
61. **Bakalinsky**, A.T., Harbertson, J. Enhancing red wine texture by aging on the yeast lees. Pacific NW Center for Small Fruits Research Conference. OSU, Dec 4, 2008.
60. **Bakalinsky**, A.T. Research overview: wine, energy, nanotech. Pacific NW Center for Small Fruits Research Conference. OSU, Dec 4, 2008.
59. **Bakalinsky**, A.T. "Contributions of yeast mannoproteins to wine quality" FST Department seminar, Oct 2007.

58. **Bakalinsky**, A.T. "Yeast contributions to wine texture", Oregon Wine Industry Symposium, Eugene, OR, Mar 2007.
57. **Bakalinsky**, A.T. "Yeast contributions to texture", OWB-sponsored "Principles of wine texture workshop, Roseburg (May 17) and Portland (May 18), 2007.
56. **Bakalinsky**, A.T. "Guaranteeing Fermentation Success" and "Native Fermentations". *Presenter and session co-chair* for all enology sessions, Oregon Wine Industry Symposium, Eugene, OR, Feb 27-Mar 1, 2006.
55. Stotz, H.U., Guo, X., *Cheng, V., **Bakalinsky**, A.T. Investigation of oxalate's effects on wilting and susceptibility to *Sclerotinia sclerotiorum*. The Biology of Transpiration: From Guard Cells to Globe. Snowbird Mountain Resort, UT Oct 10-14, 2006. Poster.
54. *Cheng, V., Stotz, H.U., *Hippchen, K., **Bakalinsky**, A.T. Use of yeast to discover mechanisms of fungal pathogen-plant interactions. OSU Center for Genome Research and Biocomputing, Eagle Crest Lodge, Sept 15-16, 2006. Poster.
53. **Bakalinsky**, A.T. Winegrape Research Days. OSU, Feb, 2004
52. *Zara, S., **Bakalinsky**, A.T., Zara, G., Pirino, G., Demontis, M., Budroni, M. *FLO*11 is required for air-liquid interfacial biofilm formation by *Saccharomyces cerevisiae*. Italian Federation of Life Sciences (FISV, www.fisv.org), Riva del Garda, Italy, 30 Sept- 3 Oct, 2004. Poster.
51. *Zara, S., Zara, G., **Bakalinsky**, A.T., Pirino, G., and Budroni, M. *FLO11* is required for biofilm formation on a liquid surface by *Saccharomyces cerevisiae*, *Yeast Genetics and Molecular Biology*, Göteborg, Sweden, 7/03. Poster.
50. *Martin, O., Brandriss, M. Schneider, G., and **Bakalinsky**, A.T. Improved use of nitrogen by yeast during fermentation. British Columbia Wine Institute Symposium, Penticton, Canada, 7/15/03.
49. *Martin, O., Brandriss, M. Schneider, G., and **Bakalinsky**, A.T. Improved use of nitrogen by yeast during fermentation. Wine Grape Research Days OSU, 3/14/03.
48. **Bakalinsky**, A.T. Control of hydrogen sulfide formation during fermentation. Wine Grape Day, OSU, 2/28/02.
47. *Zara, S., Zara, G., Budroni, M., Farris, G.A., *Martin, O., and **Bakalinsky**, A.T. *SWH1* plays a role in biofilm formation by a Sardinian wine strain of *Saccharomyces cerevisiae*. *Yeast Genetics and Molecular Biology*, Madison, WI, 8/02. Poster.
46. **Bakalinsky**, A.T. Italian sherries and other tales. Wine Grape Day, OSU, 2/20/01.
45. *Zara, S., **Bakalinsky**, A.T., Farris, G.A., Budroni, M. *HSP12* restores biofilm formation by a mutant Sardinian sherry strain of *Saccharomyces cerevisiae*. *Yeast Genetics and Molecular Biology*, Prague, 8/01. Poster.
44. **Bakalinsky**, A.T. Scientific integrity seminar on genetic technologies. OSU FST Department, 11/1/00.
43. **Bakalinsky**, A.T. Why are wine yeasts resistant to sulfur dioxide? Wine Grape Day, OSU, 3/10/00.
42. *Zara, S., **Bakalinsky**, A.T., Farris, G.A., Budroni, M. Genetic analysis of film formation in a Sardinian wine strain of *Saccharomyces cerevisiae*. *Yeast Genetics and Molecular Biology*, Seattle, WA, 7/00. Poster.

41. **Bakalinsky**, A.T. Sulfite metabolism in the yeast *S. cerevisiae*--a genetic analysis. Dept of FST, 12/99.
40. *Zara, S., **Bakalinsky**, A.T., Farris, G.A., Budroni, M. A gene required for film formation in a Sardinian wine strain of the yeast *S. cerevisiae*. Annual Center for Gene Research and Biotechnology Retreat, HMSC, Newport, Oct. 1, 1999. Poster.
39. **Bakalinsky**, A.T. Development of a wine yeast to prevent stuck fermentations, Wine Grape Day, OSU, 2/12/1999.
38. **Bakalinsky**, A.T. Construction of a wine yeast to prevent stuck fermentations, Wine Grape Day, OSU, 2/13/1998.
37. **Bakalinsky**, A.T. Sulfite toxicity in the yeast *Saccharomyces cerevisiae*. Dept. of Botany/Plant Pathology, OSU, 2/12/98.
36. *Park, H. and **Bakalinsky**, A.T. Sulfite uptake in *Saccharomyces cerevisiae*. *American Society for Enology and Viticulture*, Sacramento, CA, 6/98. Poster.
35. **Bakalinsky**, A.T. "Why are wine yeasts resistant to sulfite"; "Yeast nitrogen metabolism". Two presentations for the Northwest chapter meeting of the ASEV in Bend, 8/12-14/1997.
34. **Bakalinsky**, A.T. DNA markers for typing rootstocks; Why are wine yeasts resistant to sulfite? Two presentations for Wine Grape Day, Springfield, OR, 2/27/97.
33. **Bakalinsky**, A.T. Validation of grape rootstock DNA markers. Pacific Northwest Small Fruit Research Center, Portland, OR 12/96.
32. *Park, H. and **Bakalinsky**, A.T. Fuel alcohol from spent cherry brine. Northwest Cherry Research Review, Hood River, 11/96. Poster and oral presentations.
31. *Avram, D., and **Bakalinsky**, A.T. SSU1p, a new putative plasma membrane protein in *Saccharomyces cerevisiae*, is involved in sulfite metabolism and has a promoter regulated by FZF1p. *Yeast Genetics and Molecular Biology*, University of Wisconsin, Madison, 8/96. Poster.
30. *Nadathur, S.R., Lowry, R.R., and **Bakalinsky**, A.T. Hydrolysis of milk triacylglycerols increases the antimutagenic activity of milk. *American Dairy Sci. Assoc.*, OSU, 7/96. Poster.
29. *Nadathur, S.R., Gould, S.J, **Bakalinsky**, A.T. Yogurt and fermented milk are antimutagenic. OSU Environmental Health Sciences Center, 4/93. Presenter.**Bakalinsky**, A.T. and Xu, H. RAPD markers--a tragedy in two acts. Dept. of Horticulture, OSU. 1/95.
28. *Nadathur, S., Carney, J.R., Gould, S.J., and **Bakalinsky**, A.T. Palmitic acid is responsible for significant anti-MNNG activity in yogurt. *American Institute for Cancer Research*, "Dietary phytochemicals in cancer prevention and treatment", Wash., D.C., 8/95. Poster.
27. *Avram, D. and **Bakalinsky**, A.T. *FZF1* (*SUL1*) in high copy number suppresses sulfite sensitivity, but not glucsoe derepression in a *GRR1* mutant of *S. cerevisiae*. *Cold Spring Harbor Yeast Biology*, 8/95. Poster.
26. *Nadathur, S., Carney, J.R., Gould, S.J., and **Bakalinsky**, A.T. Isolation of antimutagens from yogurt. *Institute of Food Technologists*, Anaheim, CA, 6/95. Paper.

25. *Avram, D. and **Bakalinsky**, A.T. Mutations in the yeast *GRR1* gene cause sensitivity to sulfite. OSU Center for Gene Research and Biotechnology, Newport, OR, 9/94. Poster.
24. *Xu, H., *Wilson, D.J., Arulsekar, S., and **Bakalinsky**, A.T. Sequence-specific PCR markers are superior to RAPDs for fingerprinting grape rootstocks. OSU Center for Gene Research and Biotechnology, Newport, OR, 9/94. Poster.
23. **Bakalinsky**, A.T. Antimutagenicity of yogurt, OSU Environmental Health Sciences Center and Marine/Fresh Water Biomedical Center Joint Seminar, 3/94. Poster.
22. **Bakalinsky**, A.T. Antimutagenicity of yogurt: implications for human health, OR Dairy Industries Conference, Valley River Inn, Eugene, OR, 2/94.
21. *Avram, D., *Xu, X., *Wightman, J., Geller, B.L., and **Bakalinsky**, A.T. A sulfite-sensitive mutant of *S. cerevisiae* exhibits a drug hypersensitive phenotype. *Yeast Genetics and Molecular Biology*, University of Washington, Seattle, 8/94. Poster.
20. **Bakalinsky**, A.T., *Xu, H., *Wilson, D.J., and Arulsekar, S. Random amplified polymorphic DNA markers are inadequate for fingerprinting grape rootstocks. *American Society for Horticultural Science*, Oregon State University, 7/94.
19. *Nadathur, S.R., Gould, S.J., and **Bakalinsky**, A.T. Yogurt is antimutagenic. *American Dairy Science Association*, Minneapolis, MN, 7/94.
18. *Nadathur, S.R., Gould, S.J., and **Bakalinsky**, A.T. Lactic acid bacteria produce antimutagens during yogurt fermentation. *Institute of Food Technologists*, Atlanta, Georgia, 6/94. Poster.
17. *Xu, H., *Wilson, D.J., Arulsekar, S., and **Bakalinsky**, A.T. Derivation of sequence-specific DNA markers for fingerprinting grape rootstocks. *American Society for Enology and Viticulture*, Anaheim, CA, 6/94.
16. **Bakalinsky**, A.T., *Wilson, D.J., Arulsekar, S. DNA fingerprinting of grape rootstocks. OR-MASS Biotechnology Partnership, Sunriver, OR, 11/93.
15. **Bakalinsky**, A.T., *Wilson, D.J., Arulsekar, S. DNA fingerprinting of grape rootstocks. Pacific Northwest Small Fruit Research Center, Pasco, WA, 11/93.
14. **Bakalinsky**, A.T. Antimutagenicity of yogurt. OSU FST Department, 10/93.
13. **Bakalinsky**, A.T., *Wilson, D.J., *Xu, H., Arulsekar, S. Random amplified polymorphic DNA markers are inadequate for fingerprinting grape rootstocks. OSU Center for Gene Research and Biotechnology, Newport, OR, 9/93. Poster.
12. **Bakalinsky**, A., *Wilson, D. and Arulsekar, S. DNA fingerprinting of grape rootstocks, *American Society for Enology and Viticulture*, Sacramento, CA, 6/93.
11. **Bakalinsky**, A., *Wilson, D. and Arulsekar, S. DNA fingerprinting of grape rootstocks, *American Society for Enology and Viticulture, Eastern Section*, Rochester, NY, 7/93.
10. **Bakalinsky**, A.T., *Wilson, D.J., Arulsekar, S. DNA fingerprinting of grape rootstocks. Pacific Northwest Small Fruit Research Center, Portland, OR, 11/92.
9. **Bakalinsky**, A.T. Use of RAPDS to fingerprint grape rootstocks and varietal clones. OSU RAPDs Group, 9/92.
8. **Bakalinsky**, A.T. Use of RAPD markers for fingerprinting grape rootstocks and varietal clones. Nursery, Laboratory and Vineyard Stategies for Grapevine Improvement, Napa, CA, 8/92.

7. **Bakalinsky**, A.T. Use of RAPD markers for fingerprinting grape rootstocks and varietal clones. Agritope, Inc., Beaverton, OR, 7/92.
6. *Xu, X., *Wightman, J.D., Geller, B.L., and **Bakalinsky**, A.T. Sulfite toxicity in the yeast *Saccharomyces cerevisiae*. *American Society for Microbiology*, New Orleans, LA, 6/92. Poster.
5. *Wightman, J., *Xu, X., Yorgey, B.M., Watson, B.T., McDaniel, M.R., Micheals, N.J., and **Bakalinsky**, A.T. Evaluation of genetically-modified wine strains of *Saccharomyces cerevisiae*. *American Society for Enology and Viticulture*, Seattle, WA, 6/91.
4. **Bakalinsky**, A.T. The pyruvate decarboxylase genes of *Saccharomyces cerevisiae*. OSU Molecular Biology and Genetics Journal Club, 5/90.
3. **Bakalinsky**, A.T. Industrial strains of *Saccharomyces cerevisiae*--basic and applied aspects. OSU Genetics Program, 2/90.
2. **Bakalinsky**, A.T. The chromosomal constitution of wine strains of *Saccharomyces cerevisiae*, OSU Department of Microbiology, 1/90.
1. **Bakalinsky**, A.T. Applying genetics to wine yeast improvement. OSU FST Department, 11/89.

Grants and Contracts

Pending grants

Title	Agency	PI	Amount ($)	Period
Production and Evaluation of Gadusol as a Natural Sunscreen and Wound Healing Promoter	**NIH**	**Mahmud, T, PI; co- Investigators: Bakalinsky, AT,** Indra A, Ganguli-Indra G.	1,784,692; (Bakalinsky portion: 588,000)	10/1/16-9/30/21

Evaluation of natural sulfite-producing wine yeast for making organic wine	USDA-ARS (NWCSFR program)	**Bakalinsky, AT**	$68,628	9/14-9/16
Autoclave for shared use in FST department	RERF (OSU Research Office)	**Bakalinsky, AT** with 9 co-investigators from FST)	$27,554	2/13-1/14
Renewable biodiesel from crop residues	Agricultural Research Foundation	**Bakalinsky, AT**	$12,500	2/13-1/15
Characterization of mannoprotein –producing wine yeasts: effects on micro-vinification	Sardinian regional government (Italy)	**Zara, S** (My role: collaborator)	$187,615 (Bakalinsky portion: $15,000)	1/12-12/14

In vivo detoxification of acetic acid by *S. cerevisiae*	USDA-AFRI	**Bakalinsky**, **AT**; **Penner, M—**co-PI	$499,013 (Bakalinsky portion: $300,000)	11/09-11/14
Stability of yeast mannoproteins in Oregon Pinot noir wines	USDA-CSREES (NWCSFR program)	**Bakalinsky**, **AT**	$35,000	7/09-6/12
Cell wall structure and phenotypic analysis of flor strains of *S. cerevisiae*	Sardinian regional government (Italy)	**Zara, S**; (My role: collaborator)	$115,000 (Bakalinsky portion: $5,000)	7/10-12/11
Enhancing red wine texture by aging on the yeast lees	USDA-CSREES (NWCSFR program)	**Bakalinsky, AT**	$95,000	7/05-6/08
Genomics-based determination of nanoparticle toxicity: structure-function analysis	EPA (STAR program)	**Bakalinsky, AT**	$199,993	4/07-4/10
Genetic basis of oxalate sensitivity in relationship to *Sclerotinia* diseases	*Sclerotinia* Initiative (USDA program)	**Stotz, H**; **Bakalinsky, AT** (My role: co-PI)	$29,250 (Bakalinsky portion: $10,000)	7/06-6/07
Understanding red wine texture	OR Wine Board	**Kennedy, J**; **Bakalinsky, AT** (my role: co-PI)	$129,088 (Bakalinsky portion: $49,877)	7/04-6/06
Control of buoyancy in the yeast *S. cerevisiae*	GRF (OSU Research Office)	**Bakalinsky, AT**	$10,000	3/04-2/05
Agilent 1100 fluorescence detector	RERF (OSU Research Office)	**Bakalinsky, AT;** Kennedy, J; Watson, B; Vasconcelos , C	$4,731 (Bakalinsky portion: $4,731)	4/02
Biofilm formation by the yeast *S. cerevisiae*	Med Res Foundation of Oregon	**Bakalinsky, AT**	$25,000	9/01-8/03
Control of hydrogen sulfide formation during fermentation	OR Wine Advisory Board	**Bakalinsky, AT**	$10,000	7/01-6/02
Genetic analysis of film formation by a wine strain	GRF (OSU Research	**Bakalinsky, AT**	$8,000	4/01-4/02

of the yeast *S. cerevisiae*	Office)			
Control of hydrogen sulfide formation during fermentation	USDA-CSREES (NWCSFR program)	**Bakalinsky, AT**	$20,000	7/01-6/02
Sulfite production by wine yeasts during fermentation	Lallemand	**Bakalinsky, AT**	$7,500	1/01-3/01
Construction of a wine yeast to prevent stuck wine fermentations	USDA-CSREES (NWCSFR program)	**Bakalinsky, AT**	$47,000	6/98-6/01
Genetic analysis of film formation in wine strains of the yeast *S. cerevisiae*	International Res & Devel Travel Grant (OSU)	**Bakalinsky, AT**	$2,000	7/99-6/00
Construction of a wine yeast to prevent stuck fermentations	Agricultural Research Foundation	**Bakalinsky, AT**	$7,500	7/99-6/01
Construction of a wine yeast to prevent stuck wine fermentations	GRF (OSU Research Office)	**Bakalinsky, AT**	$8,000	4/98-6/99
Fuel alcohol from spent cherry brine	Agricultural Research Foundation	**Bakalinsky, AT**	$6,950	7/96-6/97
Validation of grape rootstock DNA markers	CSREES (NWCSFR program)	**Bakalinsky, AT**	$12,200	7/96-6/97
Fuel alcohol from spent cherry brine	OR Sweet Cherry Commission	**Bakalinsky, AT**	$6,500	7/95-6/96.

Title	**Agency**	**PI**	**Amount ($)**	**Period**
Fermentation of spent cherry brine to produce fuel alcohol	NW Cherry Briners Association	**Bakalinsky, AT**	$2,500	10/94-7/95
ID of grape rootstocks & clones by DNA fingerprinting	OR-MASS Biotech Partnership	**Bakalinsky, AT**	$7,500	10/94-6/95
Isolation of				

antimutagenic compounds from yogurt	National Dairy Board	**Bakalinsky, AT**	$120,000	7/94-12/96
Identification of grape rootstocks and varietal clones by DNA fingerprinting	CSREES (NWCSFR program)	**Bakalinsky, AT**	$10,000	7/94-6/95
Isolation of antimutagenic compounds from yogurt	GRF (OSU Research Office)	**Bakalinsky, AT**	$4,000	5/94-6/94
Isolation of antimutagenic compounds from yogurt	Yoplait Internation. Institute	**Bakalinsky, AT**	$8,735	3/94-12/94
Inhibition of tissue softening in fish by genetically engineered protease inhibitor	Oregon Sea Grant	H. An (PI). Co-PIs: Morrissey, M; Seymour, T; **Bakalinsky, AT**	$115,300	8/93-7/95
Identification of grape rootstocks and varietal clones by DNA fingerprinting	Agricultural Research Foundation	**Bakalinsky, AT**	$4,000	7/93-7/95
Use of cherry brine to produce fuel alcohol	Oregon Cherry Growers Association	**Bakalinsky, AT**; Farkas, D	$4,870	7/93-6/94
Faculty Support Funds	OSU Ag Exp Station	**Bakalinsky, AT**	$4,500	1992-93
Identification of grape rootstocks and varietal clones by DNA fingerprinting	OR-MASS Biotech Partnership	**Bakalinsky, AT**	$5,700	4/92-7/92
Tissue softening of pacific whiting: control by alpha 2-macroglobulin	Oregon Sea Grant	H. An (PI). Co-PIs: Morrissey, M; **Bakalinsky, AT**	$28,098	6/92-7/93

Isolation of antimutagenic compounds from yogurt	OSU Environ Health Sci Center (pilot project)	**Bakalinsky, AT**	$15,000	7/92-6/93
Identification of grape rootstocks and varietal clones by DNA fingerprinting	CSREES (NWCSFR program)	**Bakalinsky, AT**	$19,330	7/92-6/94
Identification of grape rootstocks and varietal clones by DNA fingerprinting	OR-MASS Biotech Partnership	**Bakalinsky, AT**	$6,000	4/92-7/93
Analysis of grape samples using RAPD markers	Agritope, Inc., Beaverton, OR	**Bakalinsky, AT**	$711	8/92-9/92
Microscopic image analysis system	OSU Ag Exp Station	Daeschel, M; McGuire, J; Penner, M; **Bakalinsky, AT**	$7,336	4/92
A model study of sulfite toxicity in *S. cerevisiae*	Med Res Foundation of Oregon	**Bakalinsky, AT**	$17,000	5/92-6/93
Identification of grape rootstocks and varietal clones by DNA fingerprinting	OR Wine Advisory Board	**Bakalinsky, AT**	$3,500	7/91-6/92
Characterization of antimutagenic factors in fermented milk products	Charles E. and Clara Marie Eckelman Foundation	**Bakalinsky, AT**	$36,000 (Funds paid stipend of Ph.D. student whom I mentored)	7/91-9/94
A protease-secreting yeast to prevent protein haze in white wines	Agricultural Research Foundation	**Bakalinsky, AT**	$7,000	7/90-7/92

A protease-secreting yeast to prevent protein haze in white wines	OR Wine Advisory Board	**Bakalinsky, AT**	$4,000	7/90-7/91
A model study of sulfite metabolism in *S. cerevisiae*	PHS Instit. Grant (OSU)	**Bakalinsky, AT**	$8,000	8/90-7/91
Roles of sulfite oxidase and sulfite transport in mediating hypersensitivity and/or resistance to sulfite in *S. cerevisiae*	OSU CGRB	**Bakalinsky, AT**; Geller, B	$5,185	5/90-7/90
A protease-secreting yeast to prevent protein haze in white wines	OR Wine Advisory Board	**Bakalinsky, AT**	$4,000	8/89-7/90
A transformation-based procedure for converting homothallic strains of the yeast *S. cerevisiae* to heterothallism	GRF (OSU Research Office)	**Bakalinsky, AT**	$4,000	7/89-6/90

Service to the Profession

Service on Research Grant Review Panels

- EPA-STAR program "Fate, transport and transformation of nanomaterials", Arlington, VA, 2010
- USDA-CREES, Pacific NW Center for Small Fruits Research, 2007

National Technical committees

- NE-1020, USDA Technical Committee, Multistate evaluation of winegrape cultivars and clones, 2004-2006

International meetings

- Invited session moderator, *Wine Microbiology: Good, bad, or ugly*, International Cool Climate Symposium, Seattle, WA, June, 2010

Editorial boards

- Fungal Genetics and Biology, 2011-2012
- International Journal of Wine Research, 2008 - present
- International Journal of Food Science, Technology and Nutrition, 2007 - present
- Applied and Environmental Microbiology, 2001-2013
  Reviewed over 150 technical manuscripts.

Ad hoc reviewer of research grants

- USDA-NIFA, SPECA program, 2013
- NSF, 2011
- Estonian Science Foundation, 2011
- BARD (Bi-national Agricultural Research & Development Fund), 2010
- US-EPA, 2010
- Canadian Natural Sciences and Engineering Research Council, 2003, 2006 - 2010
- USDA-NRI, 1996-1998, 2002-2005
- Canadian Foundation for Innovation, 2000
- U.S. Civilian Research and Development Foundation, 2000
- American Vineyard Foundation, 2000
- Canadian Natural Sciences and Engineering Research Council, 1999
- USDA-SBIR, 1999
- OSU EHSC Pilot Project Program, 1996
- OSU EHSC Pilot Project Program, 1995
- Lodi-Woodbridge CA Winegrape Commission, 1993
- USDA-NRI, 1992

Ad hoc reviewer of manuscripts

American J. Enology and Viticulture, Annals of Microbiology, Applied and Environmental Microbiology, Australian Journal of Grape and Wine Research, Biotechnology Progress, Cancer Letters, FEMS Microbiology Letters, FEMS Yeast Research, Food Microbiology, Food Technology, HortScience, International Dairy Journal, International J. of Food Microbiology, International J. of Molecular Sciences, J. Agricultural and Food Chemistry, J. American Society Horticultural Science, Journal of Applied Microbiology, Journal Chemical Technology and Biotechnology, Journal of Dairy Science, J. Food Processing and Preservation, J. Food Quality, J. Food Science, International J. Microbiology, Molecular Microbiology, Plasmid, Trends in Food Science and Technology.

Professional Society Memberships

- American Association for the Advancement of Science, 1989 - 1995
- American Society for Enology and Viticulture, 1989 - 1995
  Wine and Health Committee member, 1991 - 1994
- American Society for Microbiology, 1989-1995
- Genetics Society of America, 1989 - 1995
  Education Committee member, 1994 - 1995

AWARDS/HONORS

Served as Reviewer on Scientific Committee to select recipients of the 2013 Italian Society for Enology and Viticulture "Research for Development" awards.

Outstanding service as on-line mentor in the American Society for Microbiology Minority Mentoring Program, 2011

Invited Professor for special course at Conegliano campus of the University of Padova, Italy: Advances in Viticulture and Enology, cycle III-enology; a 2-wk course for Italian enology students taught by invited international experts. Gave talks on the "Oregon wine industry", "Overview of the US wine industry", "Flor yeast physiology", "Advances in wine protein analysis", participated in course discussions and field trips to wine producers (Veneto and Alto Adige areas) and research centers, Oct 2010.

Invited Visiting Professor, DI.SAABA (Department of Environmental, Agricultural, and Food Sciences), University of Sassari, Sassari, Italy
Presented 4 seminars (below), wrote a manuscript on microarray analysis of yeast biofilm in collaboration with hosts, and obtained ($3,000) exploratory grant from **Biolog (Hayward, CA)** for performing "phenotype microarray" analysis on wine yeasts. Seminars presented: "Contributions of yeast mannoproteins to wine quality"; "Teaching and research in food science and technology at OSU"; "Innovative wine research in Oregon" (part of conference at Oristano, Italy); "Writing a scientific paper", Jan – Mar 2008.

Distinguished editorial board service, American Society for Microbiology, 2009

"Top Prof" teaching award of the National Mortar Board Senior Honor Society, Cap and Gown Chapter, OSU, 2000

- **Honors**

Invited to serve as an associate editor of the *International Journal of Food Microbiology*, 1995

Research Prize, Yoplait International Institute, Stockholm, Sweden in recognition of our identification of palmitic acid as a significant antimutagen in yogurt, 1995.