



**Europass
Curriculum Vitae**

Personal information

Declaration in accordance with Art. 46 e 47 DPR N. 445/2000

Alan Tagore Bakalinsky

Work experience

- 2018-present Director of Research and Co-Founder, Gadusol Laboratories, Inc., 103 SW Memorial Place, Corvallis, OR 97331
- 2018-present Professor Emeritus, Department of Food Science and Technology, Oregon State University
Corvallis, OR 97331-6602, USA
- 1995-2018 Associate Professor, Department of Food Science and Technology, Oregon State University
Corvallis, OR 97331-6602, USA
- 1989-1995 Assistant Professor, Department of Food Science and Technology, Oregon State University
Corvallis, OR 97331-6602, USA
- 1987-1989 Associate-Instructor, Department of Genetics, UC Davis
Davis, CA, 95616 USA

**Education and
training**

- 1984-1989 Ph.D., Microbiology, Department of Genetics, UC Davis, 95616, USA
- 1980-1983 M.S., Food Science (specialization in Enology), Department of Enology and Viticulture, UC Davis, 95616, USA
- 1977-1980 B.S., Fermentation Science, Department of Enology and Viticulture, UC Davis, 95616, USA

**Personal skills and
competences**

Mother tongue(s) **English**

Other language(s) **Italian**

Self-assessment

European level (*)

Language Italian

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
B1	B1	B1	B1	B1

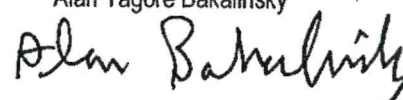
(*) Common European Framework of Reference for Languages

Courses Developed and Taught	FST 273, Wine in the Western World (2009-2018) FST/MB 479/579, Fermentation Microbiology (1997-2018) FST 251, Wine, Beer, and Spirits (1995-2005) FST 465/565, Science of Winemaking (1997-2003) FST 466/566, Wine Production Principles (2004-2007) FST 467, Wine Production and Analysis (2004-2006) MCB/GEN 555, Genome Expression and Regulation (2001-2012) FST 480, Topics in Fermentation (1998-2015)
Program Development	Co-created the Fermentation Science option program within the Food Science and Technology B.S. degree (1996-2018)
Graduate Student Training	Trained 13 graduate students as major professor and served on the thesis committees of 45 others (1989-2018)
Undergraduate Research Training	Supervised independent research projects of 26 undergraduate students (1989-2018) Served as Honor's thesis advisor for 3 undergraduate students
International Research and Teaching	Visiting Professor, DAFNAE, University of Padova, Italian Food and Wine MS program (2016-2017) Exploring World Agriculture, Oregon State University, co-led a 3-week field trip to Italy for 17 undergraduate students (2012) Visiting Professor, University of Padova, Advances in Viticulture and Enology, cycle III-enology, Conegliano (2010) Rome Study Abroad program, University of New Mexico-Oregon State University collaboration, taught a wine history course to US students in Rome (2009) Visiting Professor, University of Sassari, MS program in Agricultural and Veterinary Biotechnology, (2000-2001)
Administration	Graduate Committee Chair, Department of Food Science and Technology (1995-2007)
Research Projects	Transferability of "high natural sulfite production" in commercial wine yeasts, USDA-ARS (2017-2019) Sustainable sunscreen production, Oregon Best (2016-2018) Evaluation of natural sulfite-producing wine yeasts for making organic wine, USDA-ARS (2014-2017) Characterization of mannoprotein-producing wine yeasts—effects on microvinification, Sardinian Regional Govt (2012-2014) In vivo detoxification of acetic acid by <i>Saccharomyces cerevisiae</i>, USDA (2009-2014) Enhancing red wine texture by aging on the yeast lees, USDA-ARS (2005-2008) Genomics-based determination of nanoparticle toxicity, EPA (2007-2010) Genetic basis of oxalate sensitivity in relationship to <i>Sclerotinia</i> diseases, USDA (2006-2007) Understanding red wine texture, Oregon Wine Board (2004-2006) Biofilm formation by the yeast <i>Saccharomyces cerevisiae</i>, Medical Research Foundation of Oregon (2001-2003) Control of hydrogen sulfide formation during fermentation, USDA-ARS (2001-2002) Construction of a wine yeast to prevent stuck wine fermentations, USDA-ARS (1998-2001) Validation of grape rootstock DNA markers, USDA-ARS (1996-1997) Isolation of antimutagenic compounds from yogurt, National Dairy Board; Yoplait International Institute; Eckelman Foundation (1991-1996) Model study of sulfite toxicity in <i>Saccharomyces cerevisiae</i>, Medical Research Foundation of Oregon (1992-1993)
Attachment	Peer-reviewed publications

The undersigned declares to be informed, pursuant to Legislative Decree n. 196/2003, that the personal data collected will also be processed with informatics tools exclusively in the context of the procedure for which this declaration is made.

Date and place: Corvallis, Oregon, USA 2 February 2019

Alan Tagore Bakalinsky



Alan T. Bakalinsky, Ph.D.

Peer-Reviewed Publications

41. Dupas de Matos, A., **Bakalinsky**, A.T., Marangon, M., Curioni, A., Vicenzi, S. (2017). Chemical and sensory analysis of verjuice: an acidic food ingredient obtained from unripe grape berries. *Innov. Food Sci. Emerg. Tech.* <http://dx.doi.org/10.1016/j.ifset.2017.09.014>
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 cytotoxic 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., Arulsekhar, 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.