



Aggie Brew

The Newsletter of the campus brewing program at UC Davis

Issue 13
March 2009

We moved house!

On October 10th last we moved from Cruess Hall to the beautiful new Robert Mondavi Institute on the South side of campus. As part of the ceremony we ceremonially broke ground on the forthcoming August A. Busch III Brewing and Food Laboratory. The photo shows Charlie Bamforth and Doug Muhleman from Anheuser-Busch in action.



Michael Lewis Endowment

For more than 30 years, Professor Michael J. Lewis led the UC Davis Brewing Science curriculum, building from an idea to a program with a worldwide reputation for excellence. To recognize Dr. Lewis, the UC Davis Department of Food Science and Technology has created a new endowed fund, named in honor of Professor Michael J. Lewis, and dedicated to supporting UC Davis brewing science students. When Anheuser-

Busch gave \$30,000 to “support brewing science students,” Charlie Bamforth, Anheuser-Busch Endowed Professor of Malting and Brewing Science saw an opportunity to honor Dr. Lewis and endow a fund that will help students in perpetuity. “I thought an endowment would be an appropriate way to recognize the many contributions Professor Lewis has made to his students and to the brewing industry,” said Bamforth. “It also gives his former students an opportunity to honor and thank Dr. Lewis through gift to the fund.” It appears Dr. Bamforth was right. Already, several former students and friends of Professor Emeritus Lewis have made generous, personal gifts to build the endowment to over \$55,000. For questions about this program, or giving to Food Science and Technology, contact Melissa Haworth at mdhaworth@ucdavis.edu or (530) 754-8562. Or you can contact Charlie Bamforth (address below)

Below: Michael Lewis and Doug Muhleman with the Clydesdales at the grand opening



Internships

If YOU would be interested in taking a Davis intern just get in touch with Charlie Bamforth.

On the Road

We continue to spread the gospel. Since the last issue of Aggie Brew, Charlie Bamforth has spoken in India, New York, St Louis, Austin, San Diego, Covington KY, Denver, Victoria BC, Chicago, Cork, Manchester (England), Corvallis OR, Nashville, Orlando, Colorado Springs, Norwich (England), Auckland, Ho Chi Minh City, Scottsdale AZ, New Orleans, Portland OR Honolulu, Seattle, Yakima, Milton DE, Birmingham AL and South Africa and numerous locations throughout California

Recent Publications

Since the last newsletter we have published (or have in press) a number of articles:

Kuntz, R.J. and Bamforth, C.W. (2007) Time Course for the development of Enzymes in Barley. *J Inst Brew*, 113, 196-205

Kanauchi, M. and Bamforth, C.W. (2008) The relevance of different enzymes for the hydrolysis of β -glucans in malting and mashing. *J. Inst. Brew*, 114, 224–229.

Lee, Y.T. and Bamforth, C.W. (2009) Variations in Solubility of Barley -Glucan during Malting and Impact on levels of -Glucan in Wort and Beer. *J Am Soc Brew Chem*, in press

Bamforth, C.W. & May, J.C. (2008) The recovery of polyphenols from PVPP and their antioxidant capacity. *MBAA Technical Quarterly*, 45, 283–285

Roza, J.R., Wallin, C.E. & Bamforth, C.W. (2006) A comparison between the instrumental measurement of head retention/lacing and perceived foam quality. *MBAA TQ*, 43, 173-176

Bamforth, C. Kalathas, A., Maurin, Y. and Wallin, C. (2008) Some factors impacting beer foam. *MBAA TQ*, in press

Clark, D.T. & Bamforth, C.W. (2007) Realistic haze specifications for beer. *MBAA TQ*, 44, 160-163

Bamforth, C. (2007). Grist to the mill: historical developments in malting and the use of adjuncts. *Brewers Guardian*, 136 (7), 16-18

Bamforth, C. (2007). *Humulus superfluous?* *Brewers Guardian*, 136 (8), 30-32

Bamforth, C.W. (2008) Producing gluten-free beer – an overview

Wright, C.A., Bruhn, C.M., Heymann, H. and Bamforth, C.W. (2008) Beer Consumers' Perceptions of the Health Aspects of Alcoholic Beverages. *J Food Sci*, 73, S1-

Wright, C.A., Bruhn, C.M., Heymann, H. and Bamforth, C.W. (2008) Beer and Wine Consumers' Perceptions of the Nutritional Value of Alcoholic and Non-alcoholic Beverages. *J Food Sci*, 73, H8-H11

Bamforth, C. (2007). Wood to welds: a brewhouse timeline. *Brewers Guardian*, 136 (9), 35-38

Owens, J.E., Clifford, A.J. & Bamforth, C.W. (2007) Folate in beer. *J Inst Brew*, 113, 243-248

Bamforth, C. (2007). God's goodness and a chemistry set: A brief scientific history of Brewing Yeast. *Brewers Guardian*, 136 (10) 16-18

Bamforth, C. (2008). Cool stuff: a glimpse at the development of brewery fermentations and beyond. *Brewers Guardian*, 136 (11), 24-28

Heisner, C.B. & Bamforth, C.W. (2008) Thioresdoxin in barley: could it have a role in releasing limit dextrinase in brewery mashes? *J Inst Brew*, 114, 122-126

Bamforth, C. (2008) Brewery Greenery. *Brewers Guardian*, 137(7), 36-39

Bamforth, C. (2008) Water, water. *Brewers Guardian*, 137(8), 24-27

Bamforth, C. (2008) Turning out the lights and wrapping up warm: nibbling away at the energy bill. *Brewers Guardian*

Russell, S.T., Singh, R.P and Bamforth, C.W. (2008) *Alternative Paradigms for the Production of Beer*. *J. Inst. Brew.*, in press

Bamforth, C.W. (2009) Use of exogenous enzymes in the production of alcoholic beverages. *The Encyclopedia of Biotechnology in Agriculture and Food*, Taylor and Francis (peer reviewed)

Bamforth, C.W., Roza, J.R and Kanauchi, M. (2009) Storage of malt, thiol oxidase and brewhouse performance. *J Am Soc Brew Chem*, in press

Bamforth, C. (2008) Butts and Nasty Smells: effluent treatment. *Brewers Guardian*

Bamforth, C. (2009) Contraception, charcoal and cows: the world of brewery co-products. *Brewers Guardian*, 138(1), 24-27

Bamforth, C. (2008) The ultimate enzymology: making beer. *Food Science and Technology*, 22(4), 12-14

Bamforth, C.W. (2009) Genetic Resources of Yeast and other Micro-organisms (Harlan book)

Bamforth, C.W. and Krochta, J.M. (2009) Packaging and the Shelf Life of Beer

Bamforth, C.W. (2009). Beer and the Quality of Life. *Proc IBD Africa Convention* (no page numbers).

Bamforth, C. (2009). People matter. *Brewer and Distiller International*,

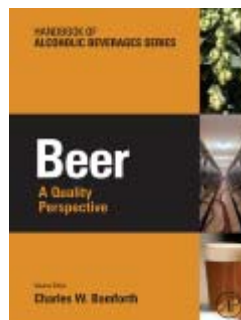
Smythe, J.E. and Bamforth, C.W. (2009) An evaluation of the public understanding of beer and brewing. *MBAA Technical Quarterly*, doi:10.1094/TQ-46-1-0316-01

The latest books



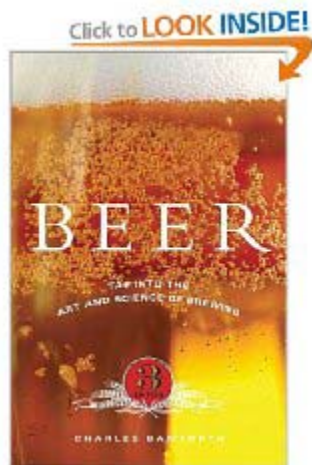
And boy has this irritated a few winemakers! Beer strikes back:

<http://www.cambridge.org/us/catalogue/catalogue.asp?isbn=9780521849371>



An in-depth approach to quality

<http://www.elsevierdirect.com/product.jsp?websiteid=6&siteflag=USST¤cy=USD®ion=US&lid=0&iid=0&sid=0&isbn=9780126692013>

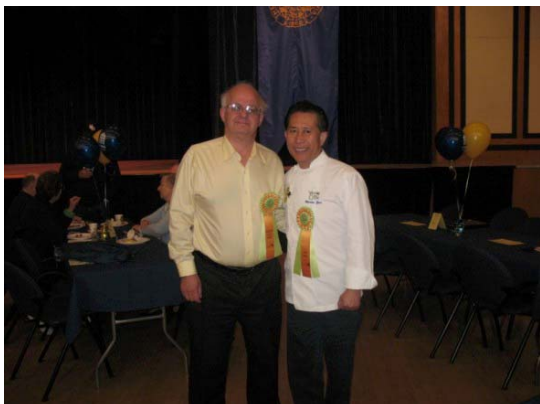


The Third Edition!

<http://www.us.oup.com/us/catalog/general/subject/Chemistry/FoodChemistry/?view=usa&ci=9780195305425#>

Picnic Day

So guess who was honored as a Marshal on Picnic Day last!



Above: 2 of the 4 marshals: Charlie Bamforth and Martin Yan

Next: in the Cadillac with the 2 other marshals, Andy Waterhouse (wine guy!) and (in the front) beatbox singer "Butterscotch" Clinton



On The Web

Some places where we are featured:

Click on the Podcast at

<http://www.nyas.org/landing/sc/food.asp>

I went to Google!

<http://www.youtube.com/watch?v=pjLHsUOraHI>

And Capitola – scroll down and listen

<http://trashotron.com/agony/news/2008/08-04-08.htm>

And just in case you want one more

<http://www.archive.org/search.php?query=subject%3A%22Charles%20Bamforth%22>

We would love to hear from you

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