

## Affinage, a research based scientific approach – Eric Meredith's Vision

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As far as we know most of the fermented foods we enjoy today exist because of a series of lucky accidents and extraordinary circumstances. Some of them happened thousands of years ago and some have a much shorter history, but without fermented foods our evolution may have been drastically different. Would we have stopped to plant wheat and other grains if making bread and beer didn't motivate us? Could we have survived cold winters in the extremes of the Earth if milk wasn't transformed into cheese when animals could graze on lush pastures before the snow fell? I'm almost certain we could have adapted by other means, but our lives would be far less interesting without our favorite fermented foods. Evolution should help reduce our reliance on trial and error or lucky accidents to make strides in affinage, and scientific research will be the answer.

I remember when I was told Daphne was coming to visit the caves in St Haon Le Chatel and she was bringing someone who was interested in what Herve Mons was working on at that time. Because I was a native English speaker and I had gained some responsibility in the business I was to lead the visit. I remember being excited and nervous to meet Daphne because she really had her finger on the pulse of the cheese industry and I had heard so much about her. I count myself among the very lucky to have had the pleasure of working with Daphne. Her passion was contagious and confirmed that my pursuit of a career in the cheese industry was the right choice. I have since translated curriculum and created classes for hundreds of people in France and the USA. My goal is to spread cheese knowledge to anyone who wants to learn. My career brought me to Europe for almost 10 years, but permanently moving back to the USA in the summer of 2018 provided me an opportunity to use what I had learned and teach about affinage in the USA and around the world. I knew that cheese making, distribution and retail had developed in the USA, but Affinage remained the weakest link in the chain.

After winning the DZTA Scholarship in 2018 my journey towards scientific discovery, and away from trial and error began. I used my time at the ACS Conference in 2018 to poll active members seeking their most serious affinage issues and compiled a list. That information helped guide me towards the organisations that I knew could provide me with the most comprehensive approach to solving these problems. The issues identified included, mucor, pseudomonas, extraneous mold growth, rind slip, crystal formation and many more. It was obvious that these issues were causing American affineurs to chase shadows and cheese makers locate in areas without dairy research centers had nowhere to turn for help. I used my contacts in France and the UK to open doors at some of the best dairy research organisations in the world including INRA, Teagasc, CNIEL, CNAOL, and FNPL. I gained access to hundreds of thousands of research articles and interviewed cheese maker members of the CNAOL and AOP syndicates in several regions in France. The broad range of cheeses represented by the French AOPs provided me with ample academic research, and the same issues have been seen in French and British cheeses that were identified in the list from the ACS members poll. Through that meta-analysis I was able to put together a presentation introducing ACS members to proven solutions for their own commonly seen issues in affinage. That presentation introduced these esteemed European research institutions and researchers to American cheese makers and affineurs. This forum sparked a dialogue, subsequent ACS presentations and collaborative research projects for American cheese makers.

During the 5 years following the initial presentation at ACS, I continued to develop relationships with cheese makers, syndicates and researchers in Europe. Those relationships resulted in the development of a full-scale Affinage focused curriculum being taught to cheese makers and enthusiasts all over the world. I'm happy to announce that the Affinage Guide and accompanying decision matrix app will be launched this month and 5% of the profits will be donated to the DZTA Scholarship. None of this could have been possible without Daphne and her relentless pursuit of knowledge and infectious teaching spirit, together with the president and board of the Daphne Zepos Endowment who continue her legacy through their devotion to her passion.