

## A Cheesy Lecture at the Herbaria

By David Babik

On January 27<sup>th</sup>, BMC members were treated to a rare night of cheese and fungi. The night's speaker, Benjamin Wolfe Ph. D., is a culinary mycologist currently doing research at Harvard on microbial diversity in artisanal cheeses, and is teaching a course in the Microbiology of Food in BU's Gastronomy Program. An energetic and passionate speaker, Ben captivated a packed house with an in-depth look into the work he and his associates are doing on the processes underlying cheese making.

Ben's studies involve examining the microbial activity with molds, fungi, and bacteria that interact in the cheese making process. Observing traditional European techniques through the modern lenses of microscopic exploration and DNA sequencing, Ben is able to quantify and study the microbial activity that is the basis of this centuries-old tradition. This knowledge can then be brought back and shared with artisanal cheese makers to help them gain insight and control over the way cheese is made.



Benjamin Wolfe answers a question from George Davis, while Club members gather around the cheeses.

The night was a mix of scientific findings and interesting stories of cheese, molds and fungi. One of Ben's many discoveries is that some of the bacteria in French cheeses are marine in nature, a complete surprise to the French cheese producers. (The marine bacteria arrived in the sea salt used -- an even bigger surprise since salt stops bacterial growth.) Ben also pointed out how the visual impact of color can greatly impact marketability. One example was that the mold on Camembert cheese was originally an olive green and visually unappealing. When a pure white mutation occurred, it was isolated and used in Camembert production and the cheese's popularity was greatly

increased. Another example was *Sporedenama casei*, a bright orange mold which was always avoided as unappetizing. Murray's Cheese, a shop in New York City embraced the unusual look of the mold and actually inoculated cheeses with it. It is now one of their hottest sellers since people became accustomed to the unique color.

Ben told us of his work at Jasper Hill Farm in Greensboro, Vermont. He has been helping to isolate microbes in native soils, milk, and plants for domestic cheese production. Currently, most cheese makers must purchase microbes of French origin, whose supply is tightly controlled by large corporations such as Dupont.

The night finished up with a sampling of some excellent cheeses, provided by the Club, under Ben's guidance. The BMC was very fortunate to have Ben share his wealth of knowledge with us. Everyone had a great time and left with a much greater depth of insight into the world of cheese making.