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## DR. PATRICK McGOVERN

BIOMOLECULAR  
ARCHAEOLOGIST

Better living through chemistry and archaeology: Dr. Patrick E. McGovern is to ancient wines, beers, meads and “cocktails” what Indiana Jones is flamboyantly reputed to be to holy grails and arks of the covenant. With a Ph.D. in Near Eastern archaeology and literature, “Dr. Pat” is the scientific director of the Biomolecular Archaeology Project for Cuisine, Fermented Beverages, and Health at the University of Pennsylvania Museum in Philadelphia and an adjunct professor in anthropology. He is now the leading authority on ancient fermented beverages and travels the world in search of new archaeological finds, which he then reverse engineers by 21st-century chemical techniques and re-creates with the help of Dogfish Head Brewery. Dr. Pat is credited with identifying the world’s oldest known barley beer (from Iran’s Zagros Mountains, dating to 3400 B.C.), the oldest grape wine (also from the Zagros, circa 5400 B.C.), the earliest fermented cacao beverage (the premier drink of the New World, circa 1400 B.C.), and the earliest known alcoholic beverage yet discovered, a Neolithic “grog” that combined wild grapes, hawthorn fruit, honey and rice from China’s Yellow River Valley and was brewed some 9,000 years ago. For the fermented beverage aficionado who wants to quench both a thirst for these beverages and their historical backgrounds, he/she should consult Dr. Pat’s website ([www.penn.museum/sites/biomoleculararchaeology/](http://www.penn.museum/sites/biomoleculararchaeology/)) and his many articles and books: most recently, *Uncorking the Past: The Quest for Wine, Beer, and Other Alcoholic Beverages* (Berkeley: University of California Press, 2010).

### WHAT CHARITY DO YOU MOST IDENTIFY WITH?

Such a charity, if it existed, might be modeled on NASA, which uses the most advanced scientific techniques to explore outer space. My charity would turn inwards to focus on this planet and discover more about how we became what we

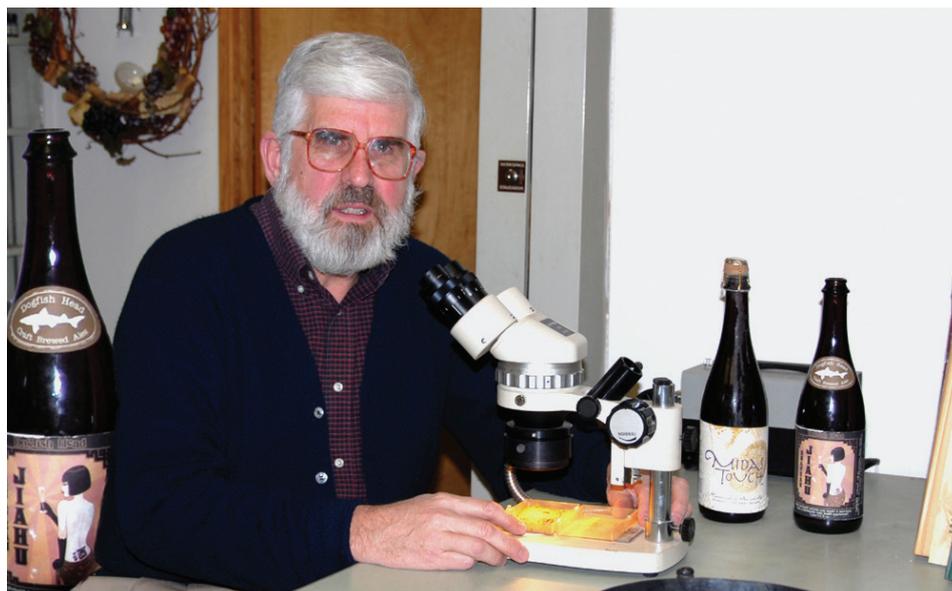


Photo by PAM KOSTY

are — biologically, culturally and technologically — over the past several million years. Only by reconstructing our past can we chart a course into the future.

### WHICH CHARACTER FROM FICTION DO YOU MOST ADMIRE?

Sherlock Holmes exemplifies what it takes to piece together the mystery of our species. Based on only the slimmest threads of evidence, he minutely examines them and applies human imagination and reasoning to arrive at a hypothetical solution to his problem, which he continues to put to the test. He does not suspend judgment forever, but takes the leap of faith and eventually nabs the guilty party.

### WHAT DO YOU CONSIDER YOUR GREATEST PERSONAL ACHIEVEMENT?

Pioneering the field of biomolecular archaeology, which has only begun to shed light on what it means to be human.

### IF YOU COULD BE THE CEO OF ANY COMPANY, WHICH ONE WOULD IT BE?

I prefer the role of explorer and thinker to that of administrator, which is more driven by power and money than by research and discovery.

### IF YOU COULD CHANGE ONE LAW, WHICH ONE WOULD IT BE?

The Pennsylvania law establishing a state liquor authority is one example of the body politic abridging our individual freedom. I can’t even import a fine wine from California, which epitomizes human culture, to the state I live in without being branded a criminal. I have similar problems with excessive government control of speech, taxation, even the food that I’m allowed to eat.

**HOW WOULD YOU DEFINE LOVE?** Love in its fullest dimensions appears to be unique to our species, which finds its highest expression

in marriage with another human being and union with the God of the universe. Physical explanations, such as brain chemistry, cannot do justice to our inner experience, based on the totality of our mysterious being in time and space.

### WHAT IS THE GREATEST THREAT CURRENTLY FACING SOCIETY?

The primary threat to the continuation of our civilization, I believe, is the growing lack of belief in a personal, omniscient God, the sine qua non for morality. As Dostoevsky said in *The Brothers Karamazov*, “If there is no God, then everything is permitted.” If you only have one life to live, and there is no final resolution, then individual humans will choose to become a law unto themselves, often at the expense of others.

### WHAT HAS BEEN YOUR CLOSEST BRUSH WITH DEATH?

In the Middle East, as we excavated an important archaeological site in southern Lebanon, I came close to death by F-15 Phantom jets and by teenagers wielding automatic weapons. Such can be the price of exploration and discovery.

### WHAT, IN YOUR OPINION, HAS BEEN THE GREATEST INNOVATION IN THE LAST 10 YEARS?

The application of increasingly sophisticated molecular biological techniques to unraveling the biology of animals, plants, even ancient hominids (e.g., Neanderthals), is having a revolutionary impact on agriculture, ecology, microbiology, medicine, etc.

### DESCRIBE YOUR PERFECT DAY.

After a delicious sleep, I rise to meet my beloved, discover and write down some new thoughts (like those I am writing here) that may shed light on my existence and the future, perhaps carry out an experiment or excavation, and certainly finish off the day with an array of fine foods and fermented beverages.