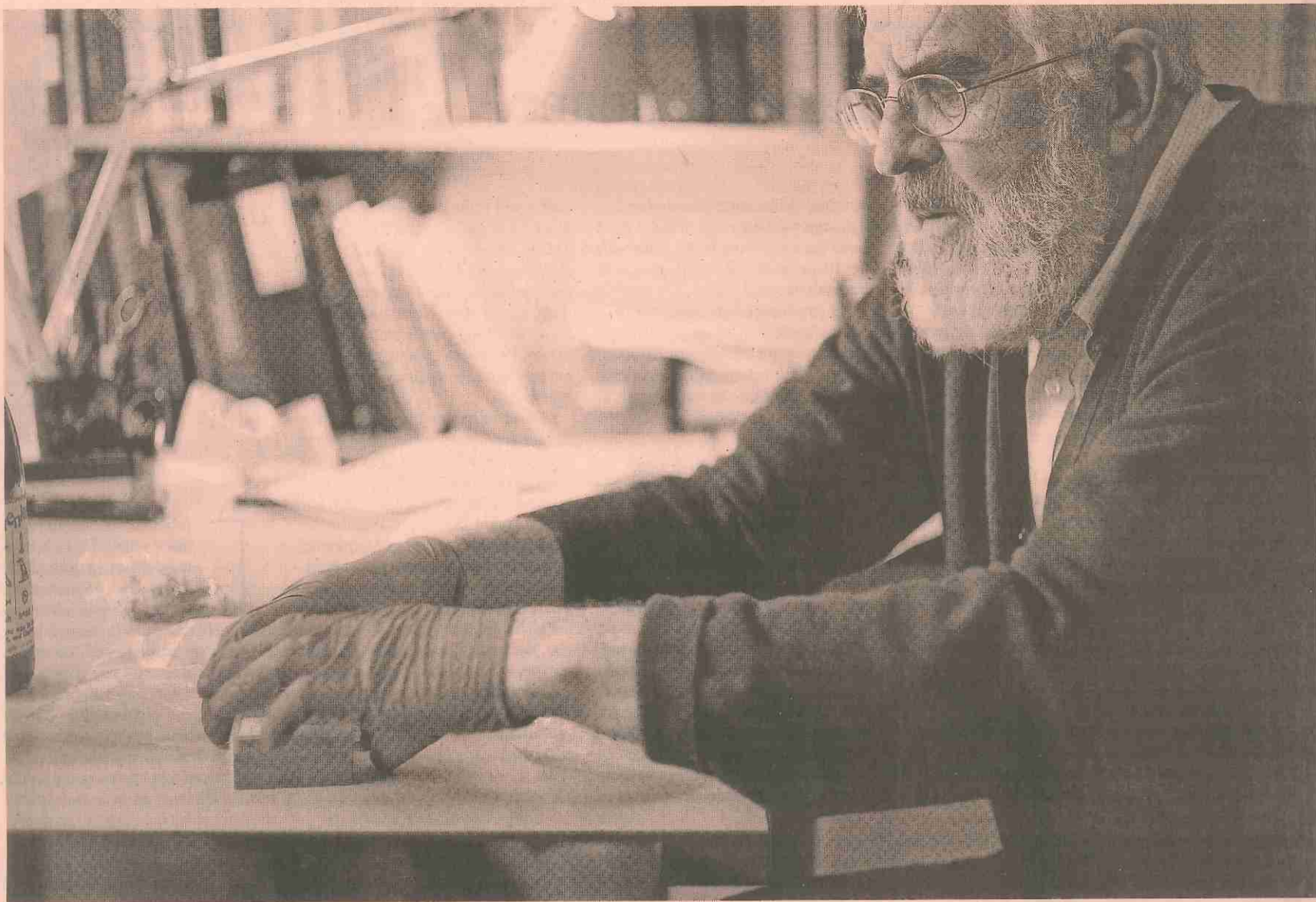


BUSINESS LIFE



A thirst for ancient beer and wine

WORKING LIVES

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Patrick McGovern reconstructs what our ancestors drank - for sale as well as academic study

The "Indiana Jones of alcohol" had no idea his career would turn out this way. How could he? His job did not exist in the 1960s, the era of his teen years. Patrick McGovern was a pioneer, helping to establish the field of biomolecular archaeology. In other words, revealing what our ancient ancestors were eating and drinking. His achievements include discovering the first proven alcoholic beverage in the world (around 7000BC from China) and the earliest grape wine (around 5400BC).

Growing up in Ithaca, New York, Dr McGovern was steered to the sciences by his parents, who were keen that he became a doctor. As a teenager in the 1960s, he could not settle on anything as serious-minded as a career. Keen to pacify his parents but also to pursue his own interests, he studied chemistry at Cornell University, with English as his minor. He was split down the middle: he loved science but also the humanities.

As it happened, these twin interests set him on course for his ultimate profession: a beer archaeologist, or the "Lazarus of libations" as he is also known. (His official title is the less snappy "scientific director of the biomolecular archaeology project for cuisine, fermented beverages, and health" at the University of Pennsylvania Museum in Philadelphia, where he is also

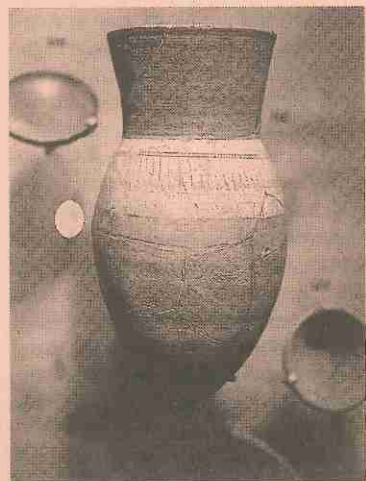
an adjunct professor of anthropology.)

He was lucky, he says, that early in his career he could move between brain research, toxicology and archaeology. "There was money then. You could go back and forth between disciplines. It's much more difficult now - you have to specialise."

Dr McGovern's ancestors had a mixed attitude to alcohol. His Irish forebears opened the first bar in Mitchell, South Dakota, in the mid-1800s. On the Norwegian side, they were teetotal. Many bottles of wine and beer have been presented to him as gifts and he has a small, although not particularly expert, cellar. He describes his attitude to alcohol as an interest rather than obsession.

As a 16-year-old on holiday in Germany he recalls drinking beer instead of Coca-Cola because it was cheaper. His interest in wine started to grow when he toured the Middle East and Europe on a tight budget with his wife, on their way to Jerusalem, where they planned to live on a kibbutz and learn Hebrew. In Europe they picked grapes for wine-makers - one vintner in the Mosel region in Germany made a particular impression when he gave the young McGovern a crash-course in wine.

During three weeks living in the vint-



A fermented beverage jar from Tutankhamun's grave

ner's house, he found out how different vintages tasted, and picked grapes on the steep, slate slopes. "The year was 1971, which turned out to be the vintage of the century," he reflects.

After obtaining a PhD in Near Eastern Archaeology and Literature from the Asian and Middle Eastern Studies Department of the University of Pennsylvania, Dr McGovern became an expert on Bronze and Iron Age pendants and pottery before developing an interest in organic materials, including dyes. As the scientific tools evolved, it meant that the traces within containers, rather than just the vases and pots themselves, were becoming interesting too.

In 1988, Virginia Badler, a colleague who had been studying at the Godin Tepe archaeological site in western Iran, contacted him about a jar from about 3500-3100BC which was stained red and she suspected had held wine. After a variety of tests, the results showed the vessel contained tartaric acid, which together with other findings, proved it had once contained the drink.

Publication of the results brought Dr McGovern to the attention of Robert Mondavi, a California wine tycoon, who organised a conference on wine with archaeologists and academics from the fields of food science, art and linguistics, and experts in viticulture.

The discussion was lively, reflects Dr McGovern, in part because it was lubricated by two types of wine at lunch and four at dinner. It led to a cross-disciplinary study of ancient beverages taking in methods of making wine and beer, the history of grape horticulture and the use of alcohol in ancient societies. "Beverages are essential to human life. Fermentation is so central to society and history. Wine is at the centre of Christianity and Judaism."

In 2000, at a dinner for Michael Jackson, the British beer writer, Dr McGovern issued a challenge to the assembled microbrewers: could they recreate the beer for King Midas's funerary feast? In 1957, Penn Museum researchers had excavated a tomb in Turkey dating back

Booze sleuth: Patrick McGovern at work. Below, a bottle of an ancient ale he helped Dogfish Head produce

Pascal Perich



to 740-700BC that may have been that of Midas or Gordion, his father. In it they found pottery vessels containing traces of grape wine and barley beer.

"I wanted to make something palatable, fit for a funerary feast for a king," Dr McGovern says. However, it could not use hops - the staple of beer - because they were not grown in the region at that time. "I invited them to the lab the next morning at 9am. I didn't expect many would turn up as they'd all been drinking." In fact, about 20 did turn up.

One who rose to the challenge was Sam Calagione, the founder and president of Dogfish Head, a brewery in Delaware that had opened with the motto "off-centred stuff for off-centred people". The American brewer had already launched an "ancient ale" series and worked with Dr McGovern to produce a brew including yellow muscat grapes, barley malt, thyme honey and saffron. It ended up on sale commercially.

The relationship with Dogfish Head meant Dr McGovern could test some of his hypotheses about ancient recipes, while also receiving a consulting fee. For Mr Calagione, it finessed his understanding of techniques and ingredients.

The pair have reproduced seven ancient ales so far. There is, says the archaeologist, "creative tension" in the partnership. The brewer's commercial imperatives mean that it would like a new beer every year. The pace of academia is slower but the commercial pressure can actually enhance the rigour of the research, since Mr Calagione is a stickler for authenticity.

Dr McGovern, 69, believes his association with Dogfish Head, where he is known as "Dr Pat", shows that "academia and business can work together if they both have a passion for discovery - in our case, bringing the past to life as accurately as possible and creating new taste sensations for people".

It sparks anthropological curiosity in beer enthusiasts. "It can open people's eyes to the background." However, he concedes that "some people are just interested in the alcohol".