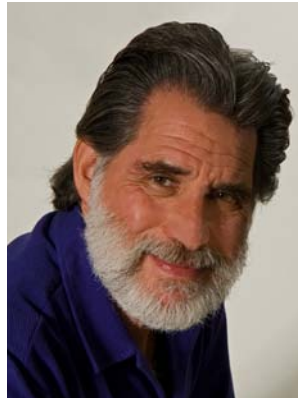


# ABC Founder Blumenthal to Receive Top Industry Award

By Dr. Amy Keller

The Natural Products Association (NPA) announced that ASP member and American Botanical Council's (ABC) founder and Executive Director, Mr. Mark Blumenthal, will be a 2013 recipient of the NPA Industry Champion Award. Mr. Blumenthal will be publicly recognized at the Annual Business Meeting of NPA, held at the Natural Products Expo East, September 25-28, 2013, in Baltimore, Maryland.

According to the NPA, the award is designed to "recognize individuals who have made notable contributions to the natural products industry above and beyond commercial success." Mr. Blumenthal told the *Newsletter*, "I am deeply grateful to the members of the Natural Products Association for choosing me for this award this year. On behalf of all the staff — past and present — of the ABC, and its Board of Trustees, I accept this award that recognizes the unique and important role that ABC has played for the past



Mr. Mark Blumenthal

MS. JONI MCLAIN.

25 years in helping to awaken people's consciousness to the vast array of benefits of numerous medicinal plants and their preparations in modern self care and healthcare."

The NPA serves to advocate for science and informed legislation in the natural products and dietary supplements industries. The NPA "strives to achieve a broader, more accessible marketplace for natural products that will improve the quality of life for consumers worldwide."

Mr. Blumenthal continued, "Even though this award is titled the 'NPA Industry Champion Award,' I believe that ABC and I have worked for the benefit of the entire natural products and natural health 'community,' not just the industry per se.

That is, we see the industry as a subset of a much larger group of stakeholders in natural, plant-based health; this includes consumers, researchers, health professionals, educators, journalists, regulators, and many others." ■

## Hot Topics in Pharmacognosy: Old Pharmacognosy, Modern Methods!

By Dr. David Newman

A very interesting paper was recently published in the *Proceedings of the National Academy, USA* (doi/10.1073/pnas.1216776110), by an archeology group from Tuscany led by Dr. Gianna Giachi. In 1974, a shipwreck dating from roughly 150 BC was discovered off the coast of Tuscany, close to what was the Etruscan city port of Populonia (modern day Piobino). Part of the cargo of this small vessel were a series of tin "pyxis," small containers that were thought to be part of what would then have been a physician's "traveling kit," or in another parlance, a doctor's "black bag."

The materials were not further investigated until recently when an X-ray of one of the tin *pyxides* showed the presence of five discoid "tablets" inside the *pyxis*. These were approximately 4 cm in diameter and averaged 1 cm in height.

In order not to further damage the artifacts, fragments from one of the broken tablets were subjected to a series of modern analytical techniques including light and scanning electron microscopy, SEM combined with energy-dispersive X-ray spectroscopy (SEM-EDX), FTIR, X-ray powder diffraction, GC/MS and botanical inspection of some plant remains. By using these techniques, the main element present was zinc as minerals (hydrozincite and

smithsonite) and then lower levels of iron (hematite) and silicon. The inorganic components appeared to be greater than 80% by weight of the tablet. The organic components (and bear in mind this was more than 2,000 years after the wreck) were starch probably from *Triticum* spp., and because of the large (relative to the rest) and varied amount of different pollen grains found, beeswax may well have been a component of the tablet.

So what might have been the use of these tablets from a pharmacognosy aspect? The standard texts at that time from Pliny the Elder and Dioscorides give details of the use of zinc oxide obtained from the smelting of copper from ores that also contained zinc (the by-product was known as *cadmia*) as treatments for ophthalmic and dermatological diseases, so it is very tempting to think that this physician specialized in treating one or both of these disease states. Or could it be an example of "polypharmacology", a methodology commonly ascribed to Traditional Chinese Medicine or other medicinal systems in the Middle and Far East?

To mix metaphors, this initial analysis is on the "tip of the iceberg," and it will be very interesting to follow the further "analytical adventures" with this shipwreck and the physician's "little black bag." ■