

# A birthday wish for the AHG

James Duke, Ph.D

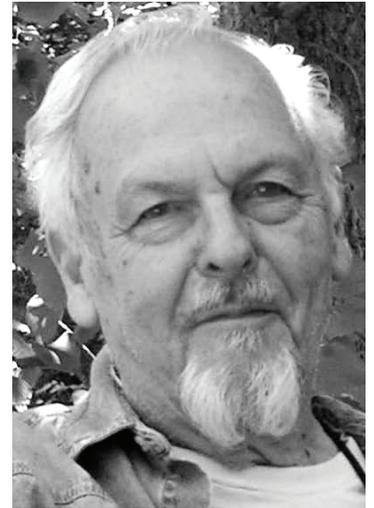
**B**orn in 1929, I have been intensely interested in plants for more than 75 years. I took my AB in Botany in 1952, my MA in 1955, and my Ph.D in 1960 or 1961 (in absentia). The late Dr. C. Ritchie Bell, my senior by about a decade, realized that my university training at University of North Carolina, Chapel Hill, left me what he called educationally “in-bred.” To fix this, Ritchie conceived an enticing idea to collect botanical vouchers (pressed herbarium specimens) of the *Apiaceae* family whose flower buds he would chemically preserve so he could count their chromosomes. So, in the summer of '59, we drove to Mexico and criss-crossed the country for a couple of months, collecting and vouchering celery relative flower buds. Then we parked his car at a Mexican airport while we flew into Guatemala and Costa Rica for a few days each doing the same thing. After shipping off many of the most important collections, we flew back to Mexico, picked up Ritchie's station wagon, and drove to St. Louis, where he had arranged a post-doc internship at the Missouri Botanical Garden to further compensate for my “in-breeding.” As I was slowly becoming interested

in Latin American plants and mariachi music, I took my guitar along with me.

All along, since age 5 in my native Alabama, I had been intensely interested in edible plants. But not until I arrived as a post-doc at the Missouri Botanical Garden did my intense interest in medicinal plants come into being. My boss, taxonomist R. E. Woodson, a specialist in the dogbane and milkweed families, was studying medicinal plants collected by naturalist Felix Woytkowski in Peru. Woytkowski's field notes were transcribed to labels which accompanied the flattened voucher specimens, with notes on the locality, habitat, folk medicinal uses, and common names. My job was, among other things, to identify those Peruvian plants, which were being examined for their medicinal potential by a major drug company, and to assist my boss, who was publishing *The Flora of Panama* at the time, by curating the Panamanian herbarium vouchers.

Finally, I was invited to the field in Panama. When I saw those same specimens in three dimensions, it almost frightened me back onto the plane. But no, I collected plants there along with their local common names (often clinchers in positive identification), to identify when I got back to Missouri.

In 1963 I left the Missouri Botanical



*James Duke served the US Department of Agriculture for over 30 years. Before retiring, he developed his online [ethnobotanical and phytochemical database](#). It is one of the most frequently consulted areas of the USDA website. Duke grows hundreds of plants on his six-acre [Green Farmacy Garden](#) with his wife, Peggy. Since retiring from the USDA, Dr. Duke served for five years as Senior Science Advisor to Nature's Herbs and with [allherb.com](#). Since 2001, he has been a distinguished herbal lecturer at Tai Sophia Healing Institute (now [Maryland University of Integrative Health](#)). He has written over 30 books on medicinal plants.*

Garden and took a job at the U.S. Department of Agriculture (USDA) which got me into Puerto Rico, home to more Latin American plants and music I had come to love. All too soon I got an invitation I could not refuse, with research and development giant Battelle Memorial Institute in Columbus, Ohio. But the job was not to be in Ohio; rather, Battelle would ship me straight back to Panama, furniture, belongings, family and all, where I would be involved in an ecological study of potential sea level canal routes in Costa Rica, Panama and Colombia. I was to sample, and collect vouchers of all the plants that the natives ingested from their environment. I was to focus on the least inhabited part of Panama, primary forests in the province of Darién, near the border with Colombia. In Darién were Pacific-slope villages largely inhabited by African-Americans, a few cattle ranches run by African-Americans and Latinos, and inland rivers mostly inhabited by Choco Indians with a few inland Kuna Indians. The Atlantic Coast and near shore San Blas Islands were inhabited almost exclusively by Kuna.

Gradually I realized that for the children of all these ethnic groups, almost all, if not all, of their medicines were coming from the native and imported plants and animals around them. These kids seemed as happy and healthy as my own back in Panama City, where they had access to the best medicines and medical facilities. And so, here in early midlife, I had become an ethnobotanist before I even learned the word "ethnobotanist." My field studies terminated in 1967 when my family and I moved from Panama to Battelle in Columbus to finalize my work on the sea level canal program. After seven years as economic-botanist/ethnobotanist with Battelle, I was already a devout believer in the healing power of herbs.

When Battelle's funds dried up, I was pleasantly surprised that the USDA said they would take back their prodigal ethnobotanist. They had an interesting and challenging program dealing with three of the most controversial medicinal plants: *Erythroxylum coca* (coca), the source of the narcotic cocaine; *Cannabis sativa* (marijuana), the source of the controlled



.....  
The budding ethnobotanist, Jim Duke, with Choco Indians in Darién, Panama, circa 1966. Photo by Dr. Joe Kirkbride

substance, THC, and related compounds of interest; and *Papaver somniferum* (opium poppy), source of codeine and morphine, very important medicinal compounds in their own right. I began learning about the growth and cultivation of these controlled substances, and was sent to study coca in the Andes, marijuana in West Indies, and opium poppy in the Golden Triangle and Burma (now Myanmar). It was very interesting and somewhat hazardous at times. All three of these millennially used plants that the Drug Enforcement Administration wished to make disappear have been clinically approved for several indications. Yes, all cause a few American deaths each year, but they do not cause as many deaths as U.S. Food and Drug Administration (FDA)-approved synthetic pharmaceuticals, “clinically proven safe and efficacious” ... to the FDA’s satisfaction.

Compared to my botanically-driven globetrotting adventures, the American Herbalists Guild is just a new kid on the block. Over the last quarter of a century, I have enjoyed watching the growth of the AHG and its journal, the biggest voice of the clinical herbalist. Me, I’m not clinical. But I truly believe in the importance of clinical use and studies of herbs.

It is my opinion that the AHG needs somehow to convince the FDA to sponsor unbiased clinical comparisons of promising herbs with competitive synthetic pharmaceuticals. Until there are clinical comparative trials, the FDA does not know that their expensive and dangerous synthetic drug is as good as any of the food “farmaceuticals” they say cannot legally be recommended. Too expensive for AHG and me. But until it is done, we don’t know whether fenugreek or licorice is better or worse than Lipitor at raising HDL cholesterol and lowering LDL cholesterol. I feel very strongly that that no new synthetic should be FDA-approved until it is proven cost-competitively safer and more efficacious than an herb or food. (In terms of natural

statins, we have over 100 food species from which to choose!) Don’t we deserve the best and most cost-effective option available? Isn’t it worth it to find out what that is?

It is already time that our government, like most of the progressive governments of the world, investigated the wholesome plants that American herbalists have been investigating as the AHG for 25 years. I have been trying for decades to prove that wisely used natural medicines are much better and safer than the unnatural synthetics, used wisely or unwisely. AHG, I’m pulling for you to carry on the battle I have fought for nearly 50 years since my work concluded in the jungles of Panama. Fortunately, I will have passed on to greener pastures by your 50th anniversary, but I hope that by then you can accomplish what I failed to do. Convince the American government, especially the FDA, that they should be seeking the best and cheapest medicine, not necessarily Big Pharma’s poisonous new expensive synthetics, for taxpaying Americans, who deserve better medicines than what they are getting. It is an elusive goal. Good luck, and happy anniversary. ■