



Where I work Kehinde Apra

I love being surrounded by plants every day. Here, it's February, and I'm in my laboratory in San Francisco, California, where I work for a company called Brightseed. I break plants down into fine powders so our scientists can uncover each plant's metabolome – the complete set of small molecules that it makes. Brightseed aims to find the molecules that matter in terms of human health and nutrition.

My bachelor's degree is in environmental science, but plants are in my bloodline. My family is from New Orleans, Louisiana, and my grandmother was considered a hoodoo woman, a medicine woman, and was very knowledgeable about plants. My father would help her to gather them. I love marrying that cultural side with my formal science background.

I 'equalize' fresh and dried plants for analysis by lyophilizing, or freeze-drying, them, and cryo-milling them into a uniform powder. I often need to treat each part of the plant – from fruits to roots – differently. Berries, for example, can be hard to mill because of their sugar content. The powders

are then washed with solvents to dissolve their metabolomic content for analysis.

Our current focus is traditional medicinal plants and major edible ones. I'm processing and archiving specimens for our botanical library. We use Forager, our proprietary artificial-intelligence platform, to predict plants' human-health benefits. The more information Forager has, the better it can predict which plants are likely to have metabolomic 'personalities' supportive of human health.

I seek plants with a healthy metabolome that are grown by people with strong links to the land, so I visit farmers' markets and source Indigenous food and medicinal plants globally, from Australia to the Caribbean. I'm really interested in medicine traditions from the Americas – of grandmothers in the Appalachians, for instance – that have not been highly regarded by scientists.

Kehinde Apra is a raw-materials research and sourcing associate at Brightseed in San Francisco, California. **Interview by James Mitchell Crow.**

Photographed for *Nature*
by Ian Tuttle.