

Molecular Mixology

BOSTON BARS HAVE BECOME CREATIVE SCIENCE LABS AS MUCH AS SOCIAL GATHERING SPOTS.

BY BRANDY RAND

If you've spent time on a bar stool lately, you may have noticed that your bartender likes to burn things with fire or freeze them with a shot of liquid nitrogen. And you may wonder—is this all really necessary? To answer the question, let's start with the root of the molecular mixology movement: the now-shuttered restaurant in Spain called El Bulli, helmed by renowned chef Ferran Adrià. He pioneered a technique in 2003 called spherification, which essentially turned liquid into solid spheres. Everything on his plate became an experiment in texture, from airy foams to bubbles and gel beads. His use of molecular gastronomy, a term coined a decade earlier, created a culinary revolution. Since then these techniques have moved into cocktails as molecular mixology, which is best summed up as the intersection of alcohol, chemistry, and art.

Ask Todd Maul, the resident cocktail wizard at **Clio** (370A Commonwealth Ave., 617-536-7200; cliorestaurant.com) and he'll tell you he just wants to make a better drink. "Molecular mixology encourages the idea that everything is possible. If I want a certain effect in the glass, how do I achieve this?" Talking to Maul about his prized rotational evaporator (also known as a rotovap) and

his centrifuge is a lesson in physics: Fractional distillation is done in a rotovap to separate the molecules by volatility so you can make your own flavors, like essence of beet or yam. The centrifuge separates the molecules by mass, making it possible to clarify lime juice for cocktails, for example. He's even used the essence of a Cuban cigar in a Manhattan. Maul's analogy is that these tools give him a 64-pack of crayon colors versus everyone else's standard 16-pack. Another of his tools goes back to the caveman days: fire. For his Hunter, he smokes the glass with wood and cinnamon, imparting a flavor that's part campfire, part hot cider.

The idea of bartenders deconstructing classic cocktails and building them back up again can be fascinating, both in flavor and technique. For instance, Domingo-Martin Barreres of **Market** (100 Stuart St., 617-310-6790; marketbyjgboston.com) at the W has borrowed his chef's sous-vide machine (French for "under vacuum"), typically used to cook food in airtight plastic bags in a water bath, to conceptualize cocktails that change color before your eyes—try his off-the-menu concoction called the Chameleon.

Noon Inthasuwana-Summers, the beverage director at **Moksa** (450 Massachusetts Ave., 617-661-4900; moksarestaurant.com), cites some of her favorite techniques as freezing sliced tomatoes or cucumbers and letting them thaw over a strainer to extract essences, or using dehydrated maple syrup to rim a glass. Moksa's house margarita employs preserved-lemon foam made by preserving the fruit in a brine with bay leaves and cloves, then whisking gelatin sheets into the liquid, before charging it with CO₂. Summers says the foam provides the salty element by giving the margarita a light "blanket" that can be enjoyed with every sip. **BC**

THE HUNTER

Clio's Todd Maul experimented with smoke from both wood and a cinnamon stick. Instead of smoking an ingredient, he layers the glass with it, so it doesn't overpower the cocktail's other flavors.

2 oz. Sage-infused rum*
(or use El Dorado 3-year-old Demerara rum)
3/4 oz. Lemon-honey bourbon syrup**
3/4 oz. Sparkling cider
1/2 oz. Clarified cider
(or reduced apple juice)

To smoke the glass, take a small piece of brown oak and a

cinnamon stick and light until they begin to smolder; quickly turn a rocks glass upside down over the wood and let it smoke until it extinguishes itself. Meanwhile, combine all cocktail ingredients in a shaker filled with ice. Shake, then strain over ice into the smoked glass.

* To infuse rum, mix sage leaves and a bottle of dark rum. Wait a day for the flavors to meld.

** To make lemon-honey bourbon syrup, mix two ounces of honey with one ounce of very hot water and stir until dissolved. Add two ounces of lemon juice, a quarter ounce of bourbon, and a cinnamon stick. Stir, then let sit for 30 minutes before using.

