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INNOVATORS Q&A

Building the credibility of the cannabis industry, one sample at a time

PureVita Labs in West Warwick, R.I., was founded by two doctors who were frustrated that they didn't have enough data to tell patients which cannabis product would be right for them

By [Alexa Gagosz](#) Globe Staff, Updated January 10, 2022, 6:00 a.m.



Marijuana samples at PureVita, a cannabis testing and analytics laboratory in West Warwick, R.I. CRAIG F. WALKER/GLOBE STAFF

The Boston Globe's weekly Ocean State Innovators column features a Q&A with Rhode Island innovators who are starting new businesses and nonprofits, conducting groundbreaking research, and reshaping the state's economy. Send tips and suggestions to reporter Alexa Gagosz at alexa.gagosz@globe.com.

Several years ago, Dr. Jason Iannuccilli had patients with chronic illnesses who began asking him about medicinal cannabis. They wondered whether it would be effective for their specific ailments, which product they should purchase, and how they should use it to achieve an appropriate effect.

Medical research made him confident about telling them cannabis does have a medicinal benefit, he said, but he didn't have any information to share about what products might best help them.

Iannuccilli also found that not all legally available products are officially tested for potency and purity, and about 70 percent of products have inaccurate labels. "How can anyone use these products responsibly if they don't even know what's really in them?" he wondered.

Iannuccilli and Dr. Jonathan Martin, formerly of [Ocean State HealthCare](#), have since founded [PureVita Labs](#), a West Warwick-based cannabis testing and analytics laboratory.

Q: What is analytical marijuana and hemp testing, and why is it important?

Iannuccilli: Most people have heard of CBD and THC, but there are almost 500 known compounds in cannabis. These act in combination to cause a variety of different moods and experiences based on the relative amounts produced by a particular genetic strain of the plant. With over 700 different genetic strains of the cannabis plant being grown under a variety of different environmental conditions, each production batch can be unique in its composition and clinical effect on the consumer.

Accurate lab testing and labeling is essential to know what's in a product, so consumers are able to select the right product and use it at the right dose for the intended effect. Most medicinal cannabis patients don't want to feel "high" when using these products. Controlling dose is the only way a consumer can achieve the desired therapeutic benefit without the negative side effects.

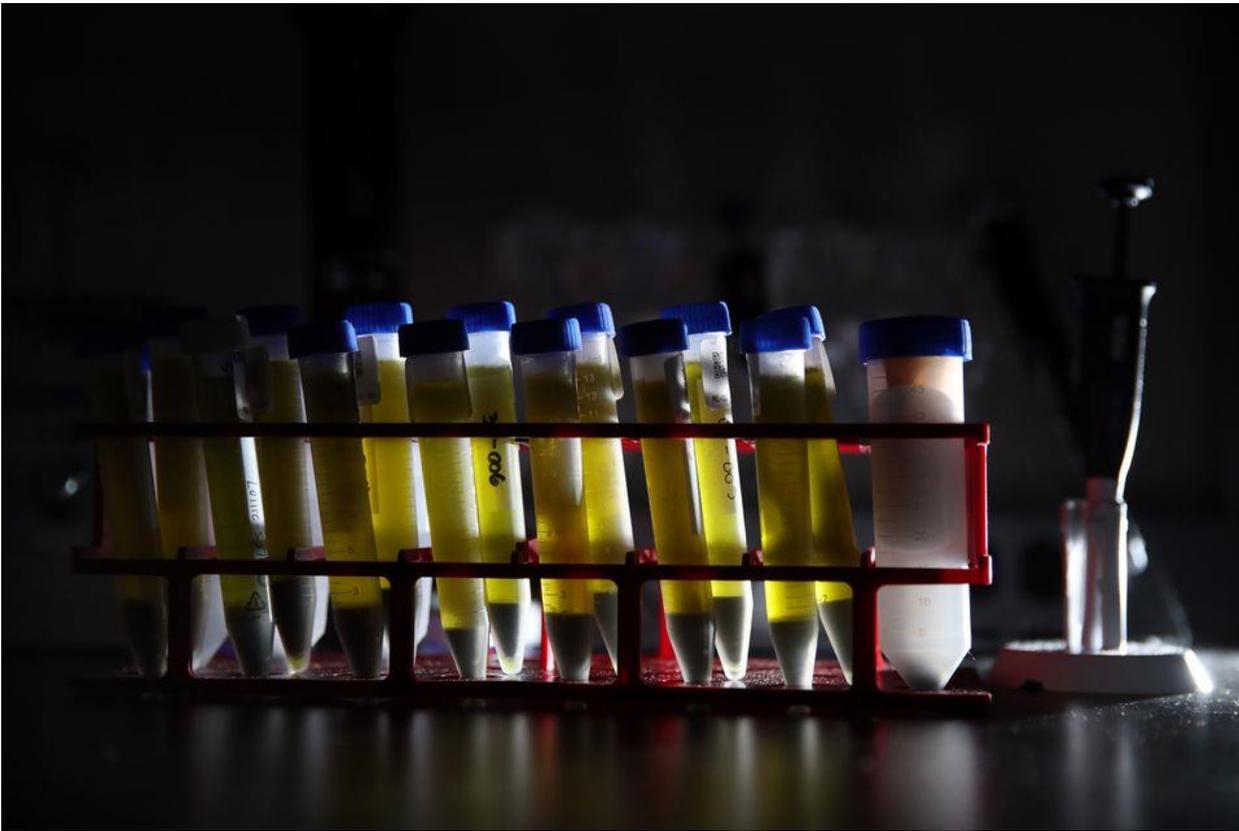


Co-founder Dr. Jason Iannuccilli at PureVita Labs. CRAIG F. WALKER/GLOBE STAFF

Product safety is also a legitimate concern. Contaminated products are often found in state-legal markets, largely due to poor regulatory oversight or disingenuous lab practices. The truth is that the real health risk in consuming cannabis is not from the plant itself, but from contaminants introduced during cultivation and manufacturing. Environmental contaminants such as pesticides, bacteria, mold, and toxic metals can accumulate in the plant and have serious adverse health effects if ingested.

Q: Is all medical marijuana tested?

Iannuccilli: Rhode Island recently required its dried flower and concentrate medical marijuana products to undergo regulatory testing for potency and microbial analysis. It has yet to enforce testing for residual solvents, pesticides, and toxic metals, and has not yet required testing for edible products.



Processed samples to be analyzed at PureVita Labs. CRAIG F. WALKER/GLOBE STAFF

Q: What businesses or dispensaries do you work with?

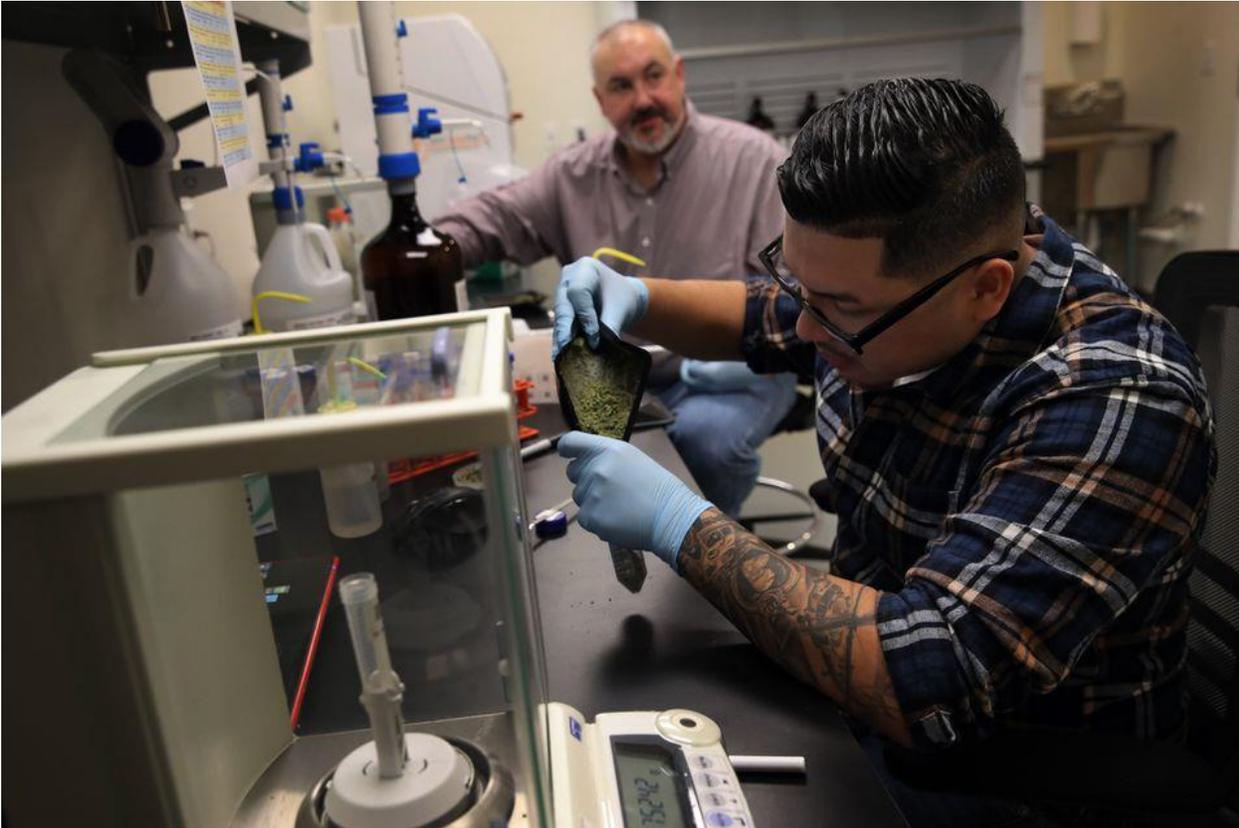
Iannuccilli: We currently service approximately 70 percent of the Rhode Island medicinal marijuana market by volume. We perform regulatory and non-regulatory testing services for all three of the state’s licensed retail compassion centers, and the vast majority of the 55 licensed independent cultivators who grow, manufacture, and sell cannabis products at wholesale to the compassion centers. We also perform potency analysis services for several hemp cultivators in Rhode Island, which is also a growing service line.

Q: What non-regulatory services do you offer?

Iannuccilli: For growers, we offer on-site potency analysis to assess crop heterogeneity, which can be used to assess yield under particular growing conditions, as well as guide the assembly of less variable production batches during harvest. This service also helps determine ideal timing of harvest for industrial hemp growers, whose product cannot exceed 0.3 percent THC potency by federal law.

Q: What happens if a cultivator is “failing” their tests?

Iannuccilli: Failing any given requirement of regulatory testing prevents a batch of product from going to market, or potentially results in significant added overhead expenses to remediate the product until it passes regulatory standards.



Field Analyst Byron Aceveda processes marijuana samples at PureVita Labs. CRAIG F. WALKER/GLOBE STAFF

Q: What is “lab shopping” and why is it a problem?

Iannuccilli: Unfortunately, in the modern cannabis industry THC potency drives product pricing. Consumers are being misled into thinking that a product with higher THC content is of better quality, but there is absolutely no scientific link between the perceived quality of a cannabis experience and THC potency alone.

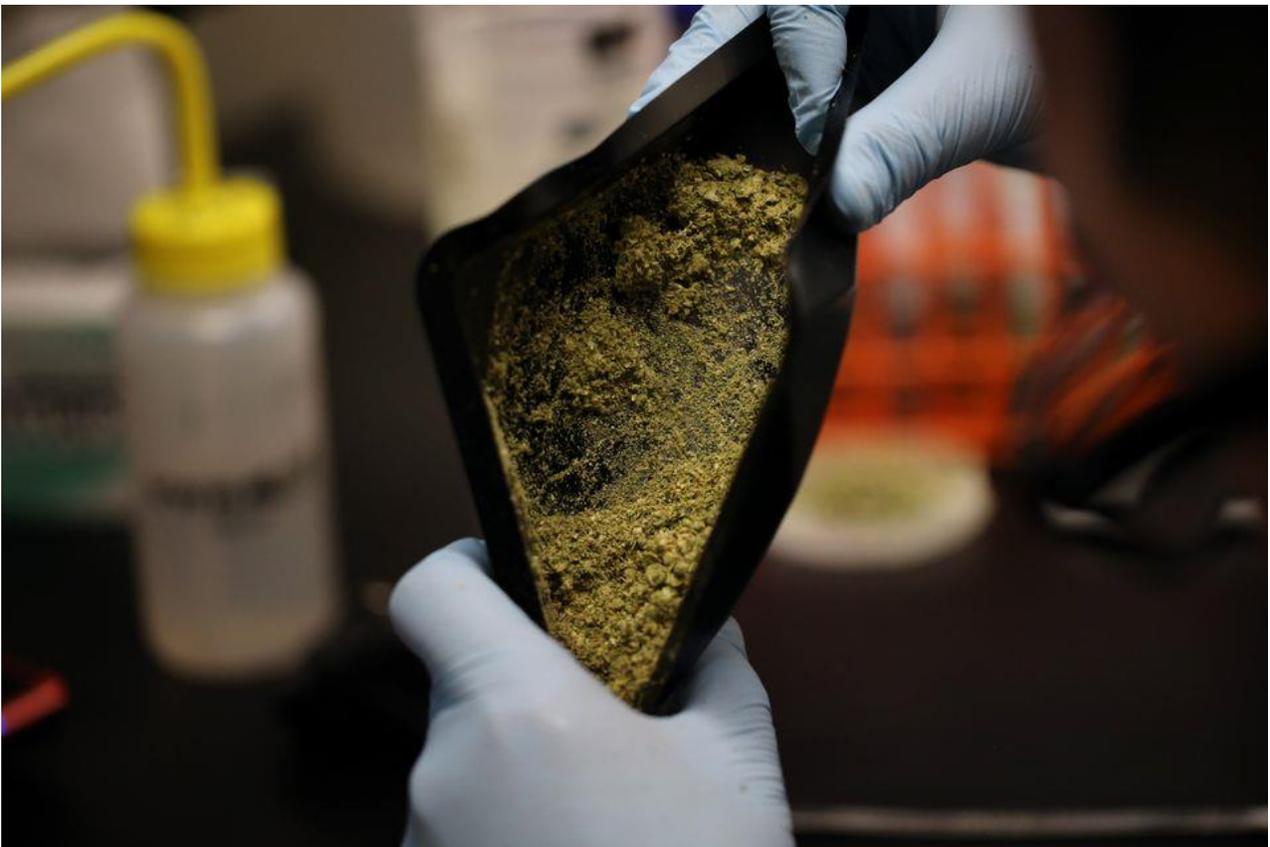
“Lab shopping” is when growers try to increase profits by choosing a testing lab solely based on its reputation for generating the highest potency numbers. In competitive markets, this only rewards incompetent labs who generate inaccurately high results or those labs who are deliberately falsifying results for a competitive

edge. The inaccuracy of product labels that results threatens the credibility of the entire industry.

Q: There are still many in Rhode Island who don't think marijuana has medicinal benefits. Others are skeptical since it's still outlawed as a Schedule 1 controlled substance by the federal government. What do you say to them?

Iannuccilli: I completely understand the skepticism and the stereotype. I used to have the same mindset. After reviewing its history however, I now realize that marijuana has been used therapeutically for thousands of years and shown to be effective in relieving the symptoms associated with a number of diseases. There has never been a single death attributed directly to THC overdose in history, which is more than can be said for alcohol or pharmaceutical drugs.

Cannabis should never have been classified as a Schedule 1 controlled substance, which by definition implies that it has no currently accepted medical use and high potential for abuse.



Marijuana samples at PureVita Labs. CRAIG F. WALKER/GLOBE STAFF

Q: How do you and your team feel about advocates pushing for legalizing recreational marijuana in Rhode Island?

Iannuccilli: I think legalizing marijuana for adult use will be a step in the right direction. Cannabis for self-medication is much safer than alcohol and less detrimental to the healthcare system. Fair taxation of “vices” is a good source of alternative revenue for the state, and as long as we can assure that these products are thoroughly tested and safe for consumption then adult legalization could be a good thing.

One challenge that remains: finding an objective way for law enforcement officers to identify intoxicated drivers. There is currently no effective “breathalyzer” test, and field sobriety testing may be the only tool available to identify offenders.

Q: How could your lab help develop standards in the recreational marijuana space if that passes the legislature?

Iannuccilli: For starters, to improve the accuracy of product labels we can standardize the way that labs collect representative samples of marijuana products for testing, and also require that all labs use a standard reference agent when “calibrating” analytical instruments for quality assurance on a regular basis.

We can also standardize specific requirements for labs to maintain appropriate environmental conditions in designated testing spaces to minimize external factors that could impact the accuracy of results. We also need to improve the way lab-generated product data is presented to the consumer so that it’s easily understood and can be used to make decisions about the appropriate product for them.