



2018 Recap

A Report for OCP Donors, Partners, and Supporters

Prepared by Beth Schechter, Executive Director

opencannabisproject.org

Dec. 30, 2018



Filter by component	Blueberry	000456					
THC	▲ Cascade Labs	H2O	8.95%	Total THC	154.00 mg/g	Total CBD	0.00 mg/g
Operator	§ Phylis Bioscience	▲ Phinewa	2.75 mg/g	Myrcene	5.99 mg/g	Linalool	0.22 mg/g
		Spots	883450	Bases	133359076	Size	37.3 MB
Value		Blueberry	000577				
<		§ Phylis Bioscience	Published 2016-10-25	Sample	3e039f93898-TSCA_Blueberry		
>				Spots	8557989	Size	29.9 MB
Filter				Strategy	AMPLICON	Source	GENOMIC
						Selection	PCR
		Blueberry	000734				
		§ Phylis Bioscience	Published 2016-10-25	Sample	339598a832a7-TSCA_Blueberry		
				Spots	1564216	Size	81.0 MB
				Strategy	AMPLICON	Source	GENOMIC
						Selection	PCR
		Trinity Blueberry	000800				
		§ Phylis Bioscience	Published 2016-10-25	Sample	1922097087a8-TSCA_Trinity_Blueberry		
				Spots	1421786	Size	14.0 MB
				Strategy	AMPLICON	Source	GENOMIC
						Selection	PCR
		Blueberry	000831				
		§ Phylis Bioscience	Published 2016-10-25	Sample	54294ab62d0-TSCA_Blueberry		
				Spots	1553370	Size	25.8 MB
				Strategy	AMPLICON	Source	GENOMIC
						Selection	PCR
		DJ Short's Blueberry	000850				
		§ Phylis Bioscience	Published 2016-10-25	Sample	690015e0f68-TSCA_DJ_Short's_Blueberry		
				Spots	3799772	Size	452.8 MB
				Strategy	AMPLICON	Source	GENOMIC
						Selection	PCR



Letter from the Executive Director

The Open Cannabis Project (OCP) set out to make [2018 the Year of the Database](#) – the year to rebuild and relaunch our technology, making it possible for growers and labs to easily and anonymously share their data and create public prior art records. This capability was not available when we inherited the project just over a year ago, nor was there space for cannabinoid and terpene data in the old framework.

As 2018 comes to a close, we're proud to report that we've delivered on this promise. With the help of data donated from the [Cultivation Classic](#) – one of the most scientifically rigorous cannabis cups in the country – we built a new database primarily for chemical data. Two new partners – [Cascadia Labs](#) and [Confident Cannabis](#) – helped us by building data-export features that enabled us to launch our data-sharing program. Much of this work has been accomplished with the help of a handful of amazing volunteers and contractors who have collectively put in hundreds of hours over the course of the year.

2018 has also been a year of learning and transitions. It's been our first full year as a fiscally-sponsored nonprofit, a transition from OCP's former existence as a project out of Phylos Bioscience. Our Board has seen a few transitions as well, including the resignation of OCP co-founders – Jeremy Plumb and Dr. Mowgli Holmes – in mid-December. We are forever grateful for their guidance and contributions as we got on our feet.

With learning and transitions often come great challenges. That was no exception for OCP. For example, we've learned this year that many in our community have concerns about how their data has been shared and used. This is causing us to look critically at the role of "open" in defensive documentation for cannabis and to consider possibilities for how to do it better.

As we look to 2019, we wish to work together with the cannabis community – and in particular independent growers and breeders – to examine these kinds of issues critically, asking big questions even if it means finding answers that may be surprising or hard for some to see. We aim to use these answers to inform our work – even if it means potentially making some big shifts as an organization.

We are fortunate to be looking ahead with the gift of wisdom, gained from a year of engagement with cannabis growers and research into this uniquely complicated intersection of cannabis science, genetics, IP law, data, and ethics. We are incredibly grateful to all of our partners, donors, and community of supporters who have helped us along the way, and we look forward to having many of you by our side as we continue to traverse into unprecedented territory next year.

For the love of the plant and the people who tend it,



Beth Schechter
Executive Director, Open Cannabis Project

2018 Highlights

We launched data.opencannabisproject.org – a framework for organizing chemical and genetic cannabis data.

OCP Open Cannabis Project		Chemical	Genetic	The Project	Search	Search
Filter by component						
THC						
Operator						
<						
Value						
mg/g						
Filter						
Blueberry 000456						
✳️ Cascadia Labs	H₂O 9.90%	Total THC 154.00 mg/g	Total CBD 0.00 mg/g			
🧬 Phylos Bioscience	α-Pinene 2.75 mg/g	Myrcene 5.99 mg/g	Linalool 0.22 mg/g			
	Spots 883450	Bases 133359076	Size 37.3 MB			
Blueberry 000677						
🧬 Phylos Bioscience	Published 2016-10-25	Sample 3e038f3938f8-TSCA_Blueberry				
	Spots 567267	Bases 85657068	Size 29.5 MB			
	Strategy AMPLICON	Source GENOMIC	Selection PCR			
Blueberry 000734						
🧬 Phylos Bioscience	Published 2016-10-25	Sample 339580a832a7-TSCA_Blueberry				
	Spots 1564216	Bases 236076515	Size 81.0 MB			
	Strategy AMPLICON	Source GENOMIC	Selection PCR			
Trinity Blueberry 000800						
🧬 Phylos Bioscience	Published 2016-10-25	Sample 1922097087e8-TSCA_Trinity_Blueberry				
	Spots 1421796	Bases 214680462	Size 74.0 MB			
	Strategy AMPLICON	Source GENOMIC	Selection PCR			
Blueberry 000831						
🧬 Phylos Bioscience	Published 2016-10-25	Sample 542f34b6b2c0-TSCA_Blueberry				
	Spots 505370	Bases 76304440	Size 25.8 MB			
	Strategy AMPLICON	Source GENOMIC	Selection PCR			
DJ Short's Blueberry 000885						
🧬 Phylos Bioscience	Published 2016-10-25	Sample 6fd0015c6fc8-TSCA_DJ_Short's_Blueberry				
	Spots 3799772	Bases 572965484	Size 260.8 MB			
	Strategy AMPLICON	Source GENOMIC	Selection PCR			

In addition to data previously published on opencannabisproject.org, the new database includes data from 2017 and 2018 participants of the [Cultivation Classic](#), all of whom received cannabinoid and terpene tests from Cascadia Labs. Winners also received a genetic test from Phylos Bioscience, creating records that include both genetic and chemical information. This kind of information is useful not only to patent examiners and breeders, but to patients and students as well.

Next Steps

- Start collecting more data through our new Data Sharing Program (see next page!)
- Work with users – growers, breeders, lawyers, and scientists – to improve UX & UI so they work better for their use cases.
- Work on automation for data import process.

We developed a data-sharing program, in partnership with Confident Cannabis and Cascadia Labs.

Having a database for handling a wide range of chemical data is one thing; making a system that lets people share data with us is another.

That's because lab data results are most often shared with their customers as PDFs – which are a nightmare for data collectors who wish to get the data into tabular format. Your options are to hand-key in all of the data or to wrestle with PDF-readers, which can still be a bit error prone. Our data-sharing program addresses this conundrum.



We also needed to design a system that was lab-agnostic, so that all can participate. Thanks to Cascadia Labs and Confident Cannabis, both labs and growers now have a couple of options:

- Labs can partner with Confident Cannabis, which now has a feature to allow anonymized export of data in comma separated value (CSV) format. Customers who wish to share data with OCP can now do so through a growing number of labs who work with Confident Cannabis.
- Labs who want to share data with OCP but not go through Confident Cannabis now have an option as well: a data standard to follow and a set of protocols for providing us with an anonymized CSV of data once a month.

This helps us to make sure data is accurate and to minimize human errors in data handling.

- Learn more about our data sharing program at opencannabisproject.org/sharing-data.
- Labs who wish to share their data with us can do so at opencannabisproject.org/data-partner.

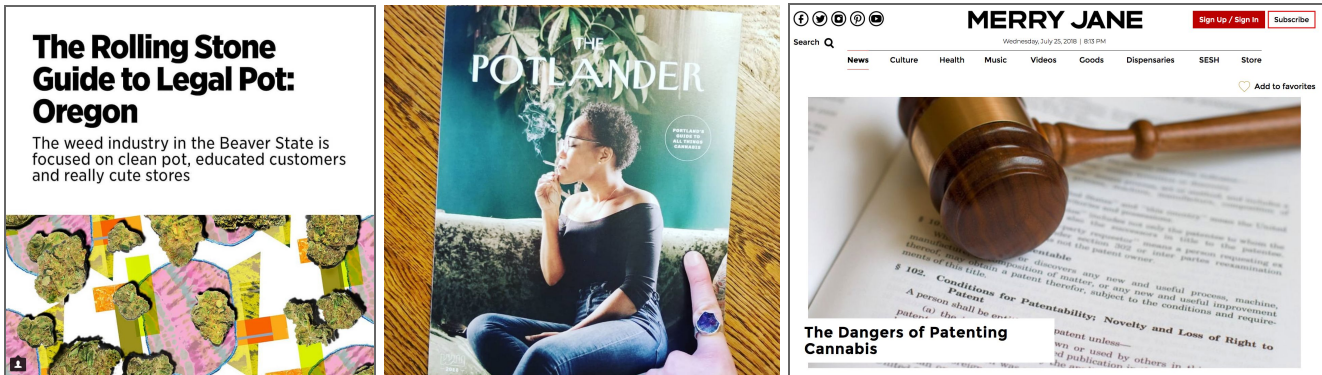
Next steps:

- Update and solidify our [terms for sharing data](#) and garner community feedback in the process.
- Solidify terms and contracts for our data partners, to ensure fair relationships and timely delivery and posting of data.
- Collect and publish data!

We've had the great fortune to have many opportunities to get our message out there – at conferences and gatherings, on podcasts, and in the news. Earlier this year, we spoke at [C2 Montreal](#) - a Creativity and Commerce conference put on by some of the great minds behind Cirque du Soleil. Our message of respecting farmers and promoting biodiversity was well received by the audience, who at the time was excitedly preparing for upcoming legalization in Canada. Our position was a welcome contrast to some of the larger cannabis businesses represented. We also recently did a panel on Open Source IP Frameworks at this year's Emerald Cup – video coming soon!



Our work has also been covered in notable publications like [Merry Jane](#), [Willamette Week](#), the [Potlander](#), [Rolling Stone](#) (twice!), and [Reuters](#). We've also been interviewed on podcasts and radio shows like [Humboldt Chronicles](#), [Weed Week](#), and [This is Cannabis](#).



OCP [won an award for our activism](#) at the 2018 Cultivation Classic and have attracted over 1800 followers on [Instagram](#). Not bad for a small team and a shoestring budget!

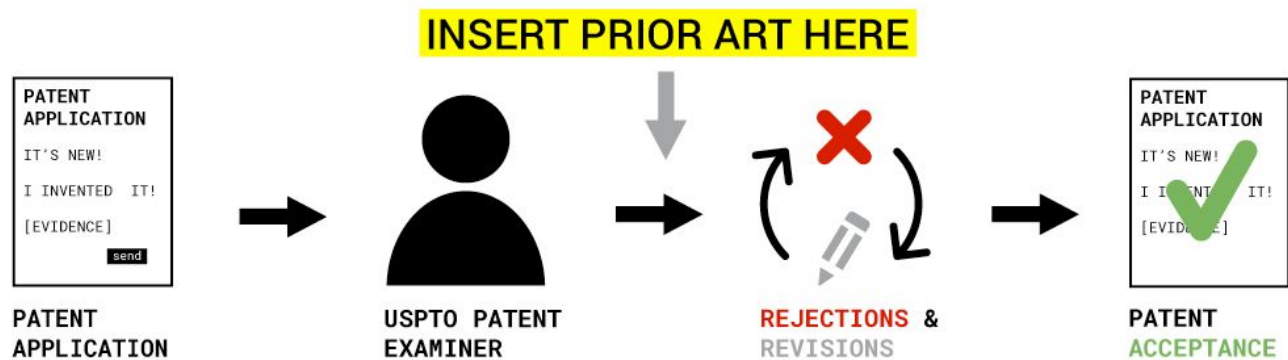
“Because of 80 years of prohibition, there is a massive lack of prior art documentation for cannabis...Folk knowledge and information that is clear to the industry might not be seen or considered by the patent office.”

- Beth Schechter, OCP ED, quoted in Reuters

In collaboration with experts like Dale Hunt and Reggie Gaudino, we've created educational resources to help bring clarity and understanding to concepts around IP and open source. We've posted this information [on our blog](#) and given quite a few 101-level talks with growers and dispensaries.

In doing so, we've gotten to create some handy diagrams. As with many concepts, intellectual property law is a complex one, and can be more easily digested graphically.

This diagram, for example, illustrates the role of prior art in the patenting process:



The Path of a Patent + Where Prior Art Fits // opencannabisproject.org

As an organization whose interest is in helping craft cannabis growers to protect their IP, creating educational materials like this are critical. In this use case, intellectual property law covers both plants and data, and it intersects with both biotechnology and ethics. In order for the community to have informed discussions and make educated choices, it's imperative to create a baseline of understanding for how all of these systems actually work.

Next steps for outreach and communications overall:

- Create more information about open source, ShareAlike and implications and options for sharing data.
- Create more materials covering the differences between copyright (which covers data) and patent and plant IP law (which covers plants)
- Engage the craft cannabis community in dialogue around open source and intellectual property so that we can codesign and ideal systems that work for their use case.

Board Transitions

OCP's inaugural board, formed on Nov. 2, 2017, included our co-founders – Mowgli Holmes and Jeremy Plumb – along with John Gilmore (President), Jesse Dodd (Vice President), Nat Pennington (Secretary), and Amanda Reiman. Jeremy acted as our Treasurer until his departure last month.

Board Departures



In April, Amanda Reiman left the OCP board to focus her efforts on the [International Cannabis Farmers' Association](#), which is doing incredible work for the craft cannabis community. In December, after fulfilling their commitments of service for OCP's first year, OCP co-founders Mowgli Holmes and Jeremy Plumb also resigned. We are grateful to all of them for their contributions and wisdom.

Board Additions



This summer, our board grew by two. Rebecca Gasca – a drug policy expert with a resume that includes Burning Man, the ACLU, and her own consulting company, [Pistil + Stigma](#) – joined us, along with Reggie Gaudino, a renowned geneticist and IP expert at [Steep Hill](#). This month, we have also been joined by Dale Hunt, a botanist and patent attorney, who, like Reggie, is committed to documenting prior art to prevent (and potentially counter) overbroad patents.

Many thanks to all of our board members – especially those who have been with us all year!



Thank you, John, Jesse, and Nat!

Volunteers made our work at OCP Possible!

OCP volunteers donated an estimated **445 hours** of time into helping out at OCP – and that’s only from the volunteers whose time we were tracking.

- 345 hours were spent on building technology
- 100 hours were spent on social media and fundraising



A shout out to Becca Isbell (left) and Douglas Butler (right) who each contributed a huge amount of hours this year. Douglas contributed 290 hours to developing the database, and Becca - our Social Media Intern – contributed about 100 hours to social media and fundraising.

Becca and Douglas, you’re the jam – thank you!

Notable volunteer contributions where hours donated are unknown

- Both **Confident Cannabis and Cascadia Labs** donated likely a hundred or more hours each in the creation of our data-sharing program.
- **Dale Hunt**, now a board member, has donated ongoing legal support to OCP throughout this year. He’s reviewed diagrams, patiently explained IP law, and helped the non-lawyers on the team to wrap our heads around the nuances around plant-related IP law. Though a separate project, Dale also put together MJPatentsWeekly.com – which has been incredibly useful in understanding the landscape around overbroad patents.
- **Our board members** have put in an unknown amount of time and an immense quantity of brainpower into all aspects of the project, from document review to business strategy to professional development.

Many thanks to so many people for your gifts of time!

We are happy to say we made lots of friends this year :)



In addition to Confident Cannabis and Cascadia Labs, we've partnered with organizations like [Tokeativity](#) and the [Growers Network](#) to help us get our message out to the greater community. Financial support (and excellent advice) from [Dr. Bronner's](#) helped us to get on our feet this year, and we received contributions from Tokeativity, [Sugartop Buddery](#), and the [Cultivation Classic](#) as well. We could not do our work without great organizations like these by our side.

In addition, we're grateful to the [National Cannabis Bar Association](#) as well as the entire cannabis legal community. These dedicated advocates have offered legally-minded feedback throughout the year. In doing so, they've helped us to consider a variety of issues and perspectives in the realm of cannabis and intellectual property law.

Finances

For a full breakdown of our numbers, please see this [profit and loss statement](#).

Since our initial board meeting on Nov. 2, 2017, and following contributions to our fiscal sponsor, MAPS.org, we received about **\$44,875** in financial contributions. Many thanks to our donors and board members for making this happen!

Our expenses came to about \$43,956.

\$37,674 was spent on people:

- Executive Director - Beth Schechter - \$30,300
- Administrative Support - Ashley Preece - \$3,331
- Technology Development - Chris Montanaro - \$2,200
- Bookkeeping - Jade Palasek - \$1,843

An additional \$7,201 has been spent on technology, printing, travel, fees to conferences, and other operational and administrative services.

2019 Budget

In 2019, we have the following goals:

- To have a more realistic budget for travel, software, printing, insurance, and other operational costs (\$1000/month)
- To hire an administrator and/or a developer – even part-time or by contract (\$3,000/month)
- To pay our Executive Director a competitive salary with benefits (\$6,000/month)
- To include line items for payroll taxes and other administrative (2.4%)

Based on this, we are looking to raise **\$122,592** in 2019, hoping to raise \$20,000 by mid January to kick off our Q1.

If you are able, please help us continue this critical work by [making a donation](#)! You can make a tax-deductible donation online through our fiscal sponsor, the Multidisciplinary Association for Psychedelic Studies (MAPS).

Looking ahead in 2019

We knew going into 2018 that we would be entering uncharted territory. As far as we can tell, we are the only organization working on prior art documentation for cannabis plants. There's no precedent to follow, only precedent to set.

The cannabis legal and business landscape also steered into new waters this year. [Canada made cannabis federally legal](#), and the [US passed the Farm Bill](#), a giant step forward for growing hemp legally in the US. We saw [Constellation Brands invest about \\$4 billion into Canopy Growth](#), who a few months later [invested C\\$429 million to acquire the intellectual property assets of ebbu](#), a hemp research company. Now that big business is becoming the norm for cannabis, the intellectual property and patenting rush is predicted to [be on its way](#). Meanwhile, unable to compete with big money, [independent farmers and dispensaries are going out of business](#) – or getting bought out – left and right.

Prior art documentation is one low-cost thing that cannabis farmers can do to protect their work – be it a plant, a process, a formulation, or something else. At the same time, open data – by definition – can be used by anyone for free. Some who have contributed data openly may be sad to learn that it's being used to help a pharmaceutical company discover a specialized plant or product that may be patented. In the end, that might be good for innovation but potentially hurt small farmers and the genetic diversity of the plant.

Given this legal and business reality, we must consider new methods for returning the balance of power to the people who built this industry. This could include bringing open source analytical breeding tools to craft growers – so they can compete with biopharmaceutical companies – or it may require that we rethink the terms we use in sharing data, and genetic data in particular.

This work cannot be done in a silo – it must be done in collaboration with both experts and the craft cannabis community, whose work we ultimately aim to protect. As we look ahead to 2019, we know that working together, with independent farmers at the helm, will help guide us to our true north.

Based on what we figure out together, we hope to partner with seed libraries, herbaria, nurseries, universities and other nonprofits to help further a collective mission for intellectual property protection, the promotion of genetic diversity, and using science and data to combat overbroad cannabis patents. We also hope what we learn can be used by the greater plant medicine and folk medicine communities.

Thank you all for your supporting this work this year. We look forward to hearing from you, and maybe even to collaborating in 2019.

Sincerely,

Team OCP

info@opencannabisproject.org