

COMMONWEALTH OF PENNSYLVANIA
HOUSE OF REPRESENTATIVES

HEALTH COMMITTEE
PUBLIC HEARING

STATE CAPITOL
HARRISBURG, PA

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TUESDAY, MARCH 3, 2020
11:00 A.M.

PRESENTATION ON
CBD'S IMPACT ON THE MEDICAL MARIJUANA PROGRAM

BEFORE:

HONORABLE KATHY L. RAPP, MAJORITY CHAIRWOMAN
HONORABLE JIM COX
HONORABLE VALERIE S. GAYDOS
HONORABLE JOHNATHAN D. HERSHEY
HONORABLE DAWN W. KEEFER
HONORABLE JERRY KNOWLES
HONORABLE CLINT OWLETT
HONORABLE BRAD ROAE
HONORABLE PAUL SCHEMEL
HONORABLE DAVID H. ZIMMERMAN
HONORABLE MARY JO DALEY
HONORABLE PAMELA A. DELISSIO
HONORABLE MICHAEL H. SCHLOSSBERG

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*Pennsylvania House of Representatives
Commonwealth of Pennsylvania*

ALSO PRESENT:

REPRESENTATIVE RUSS DIAMOND

COMMITTEE STAFF PRESENT:

WHITNEY METZLER

MAJORITY EXECUTIVE DIRECTOR

MAUREEN BEREZNAK

MAJORITY RESEARCH ANALYST

EMILY KENDALL

MAJORITY RESEARCH ANALYST

LORI CLARK

MAJORITY LEGISLATIVE ADMINISTRATIVE ASSISTANT

ERIKA FRICKE

DEMOCRATIC EXECUTIVE DIRECTOR

ERIN O'DEA

DEMOCRATIC RESEARCH ANALYST

DYLAN LINDBERG

DEMOCRATIC RESEARCH ANALYST

TRACY KOCHER

DEMOCRATIC LEGISLATIVE ASSISTANT

I N D E X

TESTIFIERS

* * *

<u>NAME</u>	<u>PAGE</u>
RACHEL LEVINE, M.D. SECRETARY OF HEALTH.....	6
FRED STRATHMEYER DEPUTY SECRETARY, DEPARTMENT OF AGRICULTURE.....	13
NATALIE KRAK POLICY DIRECTOR, DEPARTMENT OF AGRICULTURE.....	19
BILLY WOOLF CHIEF OPERATING OFFICER, STEEP HILL LABORATORY PENNSYLVANIA.....	54
STEVE GROFF, M.D. FOUNDER AND CHAIRMAN, GROFF NORTH AMERICA.....	60

SUBMITTED WRITTEN TESTIMONY

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(See submitted written testimony and handouts online.)

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P R O C E E D I N G S

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MAJORITY CHAIRWOMAN RAPP: Good morning, ladies and gentlemen. And, Members, thank you for attending today.

This is the Health Committee hearing. And the reason that we are here today is it is a public hearing on the CBD impact on the Medical Marijuana Program, but in fact there were -- I'm sure all of us, people across the State of Pennsylvania have seen the CBD oil on the shelf and other products, and many of us, including legislators, do not fully understand the effects of the CBD oil. We do know that through the Farm Bill of 2018, the U.S. Farm Bill, that we are seeing more and more products of the CBD.

So, we're really here today to gather information, the Committee, so I welcome all of you. Members, thank you for being here, and members of the public. The meeting is being recorded, and I believe it is also live-streaming, so if you would please at this time make sure that your cell phone is silenced.

And at this time we will introduce ourselves, the Members. I am State Representative Kathy Rapp, and I chair the Health Committee. And we will start to my right with Representative DeLissio.

REPRESENTATIVE DELISSIO: Good morning. Pam

1 DeLissio. I represent parts of Montgomery and Philadelphia
2 Counties, the 194th, and I am sitting in today for Dan
3 Frankel, who is the Minority Chair of the Committee.

4 REPRESENTATIVE SCHLOSSBERG: Good morning,
5 everyone. Representative Mike Schlossberg, 132nd District,
6 city of Allentown and South Whitehall Township, Lehigh
7 County.

8 REPRESENTATIVE ZIMMERMAN: Dave Zimmerman. I
9 represent the northeast part of Lancaster County.

10 REPRESENTATIVE KNOWLES: Good morning, everyone.
11 Jerry Knowles. I represent the 124th District, which
12 includes portions of Schuylkill, Berks, and Carbon
13 Counties.

14 REPRESENTATIVE ROAE: Good morning. Brad Roae.
15 I represent central Crawford County and parts of western
16 Erie County.

17 REPRESENTATIVE OWLETT: Representative Owlett. I
18 serve the 68th District, which is Tioga County, parts of
19 Potter, and parts of Bradford County.

20 REPRESENTATIVE GAYDOS: I'm Valerie Gaydos, 44th
21 District, representing Allegheny County.

22 REPRESENTATIVE KEEFER: Representative Dawn
23 Keefer. I represent northern York County and a part of
24 Cumberland County.

25 REPRESENTATIVE SCHEMEL: Paul Schemel. I

1 represented a portion of Franklin County.

2 MAJORITY CHAIRWOMAN RAPP: Thank you, Members. I
3 also recognize Representative Russ Diamond, who is not a
4 Member of the Health Committee, but I'm assuming you are
5 here because this is of interest to you, so thank you for
6 attending, sir. We appreciate it.

7 So, at this point in time we have two panels
8 today. And thank you to our panels who are willing to
9 provide us with information. And at this point in time the
10 Committee is really not looking at any legislation, but it
11 is a topic that we want to inform ourselves on. So, the
12 information that you provide us is really informative to us
13 and to the public and whoever is looking in on the
14 informational hearing today.

15 So, first on the agenda is Dr. Rachel Levine, our
16 Secretary of Health. We are honored to have you here today
17 to provide us with information. I'll go ahead and
18 introduce Natalie Krak, who is the Policy Director with the
19 Department of Agriculture, and Fred Strathmeyer, who is the
20 Deputy Secretary with the Department of Agriculture.

21 And at this point in time, Dr. Levine, if you'd
22 like to begin.

23 SECRETARY LEVINE: Thank you. Well, good
24 morning, Chairwoman Rapp and all of the Representatives and
25 everyone here today. I'm very pleased to be with you this

1 morning on behalf of the Department of Health and to
2 discuss our Medical Marijuana Program but also, as you had
3 mentioned, the CBD products from hemp, which are widely
4 distributed in the Commonwealth and really throughout the
5 United States.

6 I'm just going to summarize my remarks. I'm not
7 going to read the whole thing.

8 But, as you know, since the passage of Act 16 of
9 2016 we have worked at the Department of Health to
10 operationalize the Medical Marijuana Program. Our Medical
11 Marijuana Program just had its second birthday and has been
12 very, very successful. And if I may say I think it is one
13 of the best Medical Marijuana Programs in the country. We
14 have a fantastic Director John Collins, who is here today,
15 and great staff.

16 We have been able to approve the operations of 22
17 out of the 25 approved grower/processors, 77 dispensaries.
18 We have registered over 268,000 patients. We have almost
19 170,000 active certifications of patients for the Medical
20 Marijuana Program. We have 1,830 physicians that have
21 registered to be medical practitioners in the program,
22 1,317 are approved with 23 new ones. The rest are in the
23 pipeline of taking the CMEs to be registered.

24 You know, we have gone through many different
25 phases in terms of the Medical Marijuana Program to approve

1 the grower/processors and the dispensaries, and we have 23
2 serious medical conditions for which medical marijuana can
3 be recommended.

4 We have, I believe, six laboratories, which
5 certify the quality and safety of the product, which is a
6 key point which I'll come back and emphasize later. We
7 have a seed-to-sale tracking mechanism, so we can keep
8 track of every seed to make sure there's no diversion of
9 product. And, you know, by any standard I think that we
10 have really had a very, very successful Medical Marijuana
11 Program and have threaded the needle to keep it very
12 clinically and medically based.

13 In addition, we have the chapter 20 program for
14 medical marijuana research with eight academic clinical
15 research centers from throughout the State, our excellent
16 medical schools, and seven of them now have approved
17 clinical registrants that will serve as their
18 grower/processors and their dispensaries. And then we have
19 another round four for the eighth academic research center,
20 so the goal is that we'll have all of them have a certified
21 clinical registrant so that they can all start their
22 program to do very needed medical marijuana research.

23 I held a research summit in August, and I have a
24 new research summit coming up at the end of this month in
25 March. And, as you know, my background is in academic

1 medicine, and so I am absolutely committed and the academic
2 clinical research programs are committed to doing more and
3 more research about medical marijuana to make it even
4 better in terms of targeting serious medical conditions.

5 So, while our Medical Marijuana Program is still
6 new and growing, the deregulation of hemp, which I'm sure
7 will be discussed more by my partners at the Department of
8 Agriculture, in the Federal agriculture or the Farm Bill of
9 2018 allowed for new hemp-derived CBD products to be
10 introduced into the market, which is completely outside of
11 the Medical Marijuana Program, and I don't think that
12 people realize that. But the CBD products that you may buy
13 it many different stores, some specific CBD stores but
14 other convenience stores and grocery stores and in many
15 different places is completely outside the regulation of
16 our program, and that is derived from hemp, and our program
17 is for medical marijuana.

18 There are specific differences, and I'm certainly
19 not a botanist -- took it in college, but not a botanist.
20 My colleagues from agriculture can go into more detail.
21 But hemp is not marijuana. They are both from the same
22 cannabis sativa plant, but they are different strains.
23 Through many years of cultivation, they are actually
24 genetically different. And one of the main differences
25 which is clinically relevant is in terms of the ratios of

1 two of the compounds in the plants of THC and CBD. And
2 there are many other compounds, but medical marijuana will
3 always have higher levels of THC and be varied through
4 cultivation. And hemp almost by definition has a very,
5 very low almost undetectable level of THC. It is
6 predominantly CBD. But we do have CBD-rich marijuana
7 strains as well, but that is the main difference. And it
8 makes all the difference in the world in terms of the
9 clinical impact.

10 And, again, the process by which our medical
11 marijuana products reach the market and the hemp-derived
12 CBD products reach the market are completely different
13 because our supply chain is extremely tightly regulated.
14 Again, we have specific licensed, regulated inspector
15 grower/processors. We have specific license and inspected
16 dispensaries. We have a two-point testing system for the
17 product by laboratories to ensure the quality and the
18 safety of the product that, one, it is what it says it is
19 in terms of the ratio of CBD and THC, and that it has no
20 contaminants, bacterial contaminants, fungal contaminants,
21 et cetera. None of that is true with the hemp-derived CBD
22 products. Now, I'm not saying that all of them are bad in
23 any way, but there is no regulation of that.

24 Since it is unregulated, there are significant
25 concerns about the quality, safety, and actually the

1 content of the hemp-based CBD products in Pennsylvania and
2 in the country, and in fact we have no idea about the
3 location of where CBD products that are in convenience
4 stores are made. I would expect that most of them are not
5 made in Pennsylvania. They're made anywhere else in the
6 country.

7 According to a study by the University of
8 Pennsylvania, nearly 70 percent of the CBD extracts that
9 were bought online were mislabeled. Another study in the
10 *Journal of the American Medical Association* noted that of
11 the products they tested 26 percent contained much less CBD
12 than labeled. Then again, there could be contaminants.
13 There could be bacterial contaminants, fungal contaminants
14 because none of it is regulated.

15 So, the question is how should it be regulated,
16 and I think there's a lot of opportunity for discussion
17 within the administration and our departments and the
18 Governor's office and then of course with the legislature
19 about how they should be regulated. In a perfect world
20 they'd be regulated by the Federal Government, which did
21 the Farm Bill. And the FDA has tried to create some
22 parameters, but there is no specific enforcement of any of
23 those parameters that the FDA has said.

24 New York passed legislation regulating the
25 manufacture and sale of hemp-derived CBD products with

1 labeling requirements. We know that California and
2 Illinois have contemplated similar legislation. Colorado
3 regulates it as a food. And some States actually don't
4 allow the sale at all, particularly Idaho, Iowa, and South
5 Dakota.

6 So, the question is how that should happen, and
7 so, you know, we'd love to be part of this discussion with
8 the Medical Marijuana Program. But I think that the public
9 does not understand that. We have tried to message that,
10 but I would bet you if you asked the public, they think
11 that that is part of our program, and it has nothing to do
12 with our program either by the regulation of the
13 grower/processors, the dispensaries, the safeguards, the
14 tracking, the laboratory testing, and then, again, our
15 products are for 23 serious medical conditions, and you
16 have to see a physician to get certified, and none of that
17 is true with that program.

18 So, we very much appreciate your interest in the
19 topic, and I'm pleased to answer any questions.

20 MAJORITY CHAIRWOMAN RAPP: Thank you, Secretary
21 Levine. My plan was to have the two other --

22 SECRETARY LEVINE: Sounds great.

23 MAJORITY CHAIRWOMAN RAPP: -- members testify,
24 and then are you --

25 SECRETARY LEVINE: Sure.

1 MAJORITY CHAIRWOMAN RAPP: -- timewise --

2 SECRETARY LEVINE: That would be fine.

3 MAJORITY CHAIRWOMAN RAPP: -- you're able to stay
4 for questioning?

5 SECRETARY LEVINE: Thank you.

6 MAJORITY CHAIRWOMAN RAPP: Thank you so much.

7 So, at this time, Natalie, if you would want to
8 go forward with your testimony.

9 MS. KRAK: Sure. I'll actually let Fred kick it
10 off, Deputy Secretary Strathmeyer. He's going to give an
11 overview of the hemp program, which is within his deputy,
12 and then I'll follow up with the legality of the CBDs.

13 MR. STRATHMEYER: Thanks, Natalie. Thank you,
14 Chairwoman Rapp. I appreciate being here. I appreciate
15 your interest. There's a slideshow over here. I'm not
16 sure who's able to run it. You have a copy of it in front
17 of you to follow along. I am not going to sit here and
18 read this entire thing, so you don't have to worry about
19 that, but just highlight a few of the pieces that I believe
20 are important that, you know, the 2014 Farm Bill allowed
21 for research of the use of hemp across the country for
22 cultivation and marketing under State-run pilot programs.
23 You the legislature passed and the Governor signed in July
24 of 2016 Act 92, which allowed us to have the Industrial
25 Hemp Research Act.

1 In 2017 after we put out for applications, in
2 2017 hemp was officially growing here in the State of
3 Pennsylvania, but, again, I will add just for research,
4 which included cultivation and marketing. As Secretary
5 Levine noted earlier, the early stages of the program here
6 in this State were simply fiber and seed and not CBD. It
7 wasn't until the 2018 Farm Bill that that happened.

8 So, as you follow the slides along, you'll see
9 the progression. We opened it up in 2017, as I stated,
10 five-acre limits. The Secretary felt that was good enough
11 for research, 30 permits. The reality was that -- and then
12 in 2018 we moved that, after listening to our growers, to
13 100 acres, and we were looking for 50 applicants. And
14 you'll see that actually the numbers and how they laid out
15 were much less than that. In 2017, although 30 permits
16 were available, only 16 people participated. In '18, only
17 37. The acreage, again, first year, 36 acres, 585 acres in
18 '18.

19 The reason I bring that up is just to let you
20 know -- and I know that in the airwaves we continue to hear
21 about other States and how far we're behind other States.
22 I note this in '17 and '18 those numbers are very similar
23 to a Kentucky, to a Colorado, to an Oregon when they first
24 started. So, we felt very good about those numbers and the
25 participation we had from our growers in this State.

1 As you know and has been noted, the 2018 Farm
2 Bill reclassified hemp's status. It removed cannabis and
3 cannabis derivatives that are low in THC, again relating to
4 Dr. Levine's comment that hemp, the CBD must be .3 percent
5 or less THC, and that has removed it from the Controlled
6 Substances Act. Still -- and again noting that FDA has and
7 continues to have authority over products containing CBD,
8 but we'll get into a little bit further about that
9 relationship between the Federal Government and State
10 Governments and who's responsible, and so on.

11 So, in January of this past year, because of the
12 '18 Farm Bill being passed, the Secretary decided to
13 essentially open the gates up for anyone to participate
14 here in the State. And I say that tongue-in-cheek because
15 every grower does need to be permitted, and so there are
16 certain parameters around permitting someone in the State.
17 But there was no limit to the number of permits. There was
18 no limit to the acreage. And we've reopened those
19 applications and extended them into May of last year.

20 What this allowed for was interstate movement of
21 seed, the movement of plant material. I will note again,
22 being part of plant industry, all these plants still are
23 required and fall under any plant laws that we have here in
24 the State of Pennsylvania. And that's very important to
25 remember. So, when plants are being transported from State

1 to State, if there's any disease issues, any problems with
2 funguses, those types of things, we're looking for them
3 regardless of whether it's a chrysanthemum or it's a hemp
4 plant, so just remember that it still fell within that
5 purview. So, it wasn't as if you could just send these
6 plants anywhere, and nor do we accept them from anywhere.

7 The industrial uses, the fiber and the seed, as I
8 mentioned, and again, now we are into the ability to
9 extract and use CBDs. We'll talk a little bit later or
10 some people in this panel will talk to you about CBDs
11 because CBDs is just another part of this. There are CBGs,
12 there are -- and just do the alphabet. These are all
13 compounds. They're parts of this plant that are
14 derivatives and continue to be studied. The nursery crop,
15 again, seedlings clones, don't need to keep reading this to
16 you.

17 So, in January of 2019 we submitted a plan to
18 USDA. We followed the Controlled Plant and Noxious Weed
19 Act as we put our plan forward. We also in March, the
20 committee itself, voted to have hemp as a controlled plant.
21 That gave us a little bit more of the rails around the
22 plant. It just gave us more ability to make sure that it
23 wasn't being planted freely in the State. It followed an
24 act that the legislature gave us.

25 And I again will note that one of the reasons --

1 and maybe it'll come out later -- is that some of the
2 States are falling back to the 2014 Farm Bill currently is
3 because they would have to change so much legislation in
4 those States. Because of the Controlled Plant and Noxious
5 Weed Act, we've been able to stay -- and again, thanks for
6 having it. We've been able to stay within the rails that
7 allow us to continue to move forward in this State, one
8 that I can tell you farmers are greatly appreciative of in
9 our ability to keep moving the program forward.

10 I talked about that.

11 You can see that there are some parameters around
12 the individuals that are applying for permits. Currently,
13 with the new interim rule that was just put out in October
14 of this past year, the people that have their felony
15 background, their FBI background taken care of from this
16 point forward have a three-year and before, it was every
17 year. Now, after they get their tests done, the
18 information back to us, the applicants can be good for
19 three years. So, again, it's kind of streamlining the
20 process going forward.

21 The 2019, going back there, as you can see, the
22 numbers exponentially grew from the 36 I believe in '18 to
23 over 324 permits, 828 growing locations, and somewhere
24 close to about 4,000 acres, and that did include some of
25 the greenhouse operations here in the State, as stated on

1 there, 55 counties.

2 The next couple of slides are simply to give you
3 some insight as to what the plan is for us in the
4 Department of Ag. The plant material and the CBD crops can
5 be grown inside and outside for the crop being grown, hemp.

6 The next slide is simply a distribution, and
7 again, that just goes back to, you know, that basically the
8 crop is grown about everywhere in the State with a heavy
9 concentration in the southeastern part of the State, which,
10 again, you would anticipate that.

11 As I said earlier, the USDA interim final rule
12 was published in October 31st of this year. USDA just last
13 week approved our State plan, so we are good to go. There
14 was a slight change in respect to DEA's involvement for
15 this coming year that they've dropped back from, so we will
16 adjust our plan accordingly to that piece.

17 Again, for this year, our hemp processors, they
18 must be permitted. That is for the first time this year.
19 In the past, we had permitted our farmers and producers.
20 This year, we are taking a step in permitting the
21 processors. Do understand that our jurisdiction basically
22 runs from the field to the front door of a processor. I'm
23 sure that, again, this is where some of the conversation
24 today may go and the concerns of health and our partners in
25 health is that, you know, what happens next, but just

1 understand that PDA's jurisdiction simply is from the farm
2 to the front door of a processor, that we've worked with
3 other States, as well as our experience.

4 The next note is about prohibited varieties and
5 varieties of concern. Last year, we ran about 12 percent
6 of what we call hot crops that had to be destroyed last
7 year. I can tell you that in the State of Kentucky they
8 were over 36 percent of a hot crop. And the concern there
9 is varieties, because there's not enough research on the
10 varieties out there, that some varieties that are actually
11 high in THC are ending up with our farmers, the seed or the
12 transplant, the seedling. That is a grave concern, and so
13 we've created a list of the prohibited varieties based on
14 our experience and on the experience of other States. We
15 also have a list of varieties of concern. Those lists,
16 you're allowed to plant the variety. However, we are just
17 letting you know that you may be running into problems.
18 Again, we're trying to create a situation where our farmers
19 succeed. It's all about success.

20 So, I'll leave it there and turn it over to
21 Natalie.

22 MS. KRAK: Thanks, Fred. Good morning. My name
23 is Natalie Krak. I'm the Policy Director at the Department
24 of Agriculture. We're really pleased to be here today. We
25 get tons of questions about CBDs, the legality of CBDs, as

1 I'm sure you all do as well. As Fred and Secretary Levine
2 mentioned, the 2018 U.S. Farm Bill removed hemp from the
3 Federal Controlled Substances Act, and it included CBDs in
4 that definition of hemp. It's important to note that the
5 U.S. Farm Bill preserved the FDA's jurisdiction over hemp
6 as it relates to food products for both humans and animals.

7 Shortly after the 2018 Farm Bill was signed in
8 December of 2018, the FDA did come out with a GRAS
9 designation, which is generally recognized as safe. That
10 GRAS designation applies to the seeds of hemp. You might
11 see them in granola products. It also applied to hemp as a
12 protein powder. Again, if you're in the GNC, you may see
13 products of hemp protein powders, as well as the oil from
14 the crushed seed. So, again, that's similar to olive oil
15 or other cooking oils.

16 After that, we didn't hear a lot from FDA until
17 much later in the year of 2019. And our USDA moved forward
18 with their program as many States opened up their
19 requirements allowing for unlimited growth, as we did in
20 Pennsylvania.

21 As the Department of Agriculture, growing hemp
22 for CBD production is legal in Pennsylvania as long as you
23 are permitted by the Department of Agriculture. As
24 Secretary Levine mentioned, these are separate growing
25 systems from Medical Marijuana Program. There is no

1 overlap at all. So, we have a separate system through the
2 Department of Agriculture and the Controlled Plant and
3 Noxious Weed Act. There are no additional legal
4 requirements or concerns if you are growing for fiber,
5 whether you are a grower or a processor as long as you have
6 your permit from us and your hemp plants are within .3
7 percent THC or lower. You are legal and there are no
8 further barriers.

9 Currently, it's important to note there are no
10 Federal approvals for hemp in animal feed or animal food
11 products at this point. FDA does still have jurisdiction
12 over that. We have some research as part of the
13 Pennsylvania Farm Bill from our Center for Poultry and
14 Livestock Excellence and that is actually looking at trying
15 to get that GRAS designation for animal feed and poultry,
16 so we're really excited about that. And there's certainly
17 room for a lot more research across the various uses of
18 hemp.

19 So, as I mentioned, growing hemp for CBD
20 production in Pennsylvania is legal with our permit. It is
21 also legal to produce, to process, and sell hemp-based CBD
22 in its unadulterated form. That's if the CBD is grown from
23 a legal State permitting process like we have in
24 Pennsylvania. As I mentioned earlier, FDA preserves its
25 oversight over the food supply, and FDA does not permit

1 CBDs to be added into food or beverages or sold as a
2 dietary supplement.

3 I think it's important to note that there has not
4 been a consistent application of this rule. Dr. Levine
5 mentioned this. Certainly, CBD products were on the
6 marketplace before the U.S. Farm Bill, and we've seen a
7 proliferation of CBD products, as Secretary Levine
8 mentioned, everywhere from gas stations to health food
9 stores. There has not been consistent Federal enforcement.
10 Basically, it is not legal to put CBDs into food or
11 beverages or to make medical claims about what those CBD
12 products could be used for. As Secretary Levine mentioned,
13 there are diagnoses or under the care of a physician in the
14 Medical Marijuana Program. For hemp-derived CBDs you
15 cannot make health claims. And we have seen FDA take some
16 limited action against companies that are putting products
17 into the marketplace and making medical claims or putting
18 products into the marketplace that are clearly being used
19 in the same method as a drug.

20 We in Pennsylvania at the Department of
21 Agriculture also oversee food safety, and we have adopted
22 the Federal Food Code here in Pennsylvania, so, for
23 example, if you call into the Department and ask for a
24 restaurant permit for a CBD product, we're going to tell
25 you that that is not allowable under current Federal law.

1 We have been advocating for Federal action on
2 this issue. The FDA had a comment period open in 2019. We
3 encouraged them to come up with a Federal standard, whether
4 that is through some sort of interim regulation while they
5 continue to conduct research, but we feel like it's really
6 important for Federal consistency on this issue both for
7 continuity of business for farmers and processors and also,
8 of course, for consumer protection across the country.

9 We very much believe that there's a need for
10 additional research, as Secretary Levine brought up, and in
11 November of 2019 FDA did make an announcement that they
12 will not be able to give that generally-recognized-as-safe
13 designation for CBDs from hemp in the food supply for
14 either humans or animals. So, more research is needed. We
15 believe that that Federal action is really critical.

16 And I would like to mention that part of the
17 Pennsylvania Farm Bill included the Specialty Crop Block
18 Grant Program, which we have research announcements coming
19 in the near future for some of the hemp research that we're
20 supporting through that program.

21 So, in Pennsylvania we're really proud. Last
22 week, we just found out that our State plan to regulate
23 hemp was approved by USDA. Something that's really
24 exciting about that is we've encouraged USDA to make their
25 support programs available to hemp for States that have

1 approved plans, so we are one of nine States currently and
2 11 tribes that have approved State plans. We've worked
3 really hard to make our program work for farmers and to
4 encourage processors to come to Pennsylvania. We'll get to
5 hear from some of those later in the panel.

6 Last year in October we hosted the first-ever PA
7 Hemp Summit. We had over 600 participants from multiple
8 States, and we're looking to hold another one of those in,
9 I believe, December of 2020.

10 I think it's worth mentioning that there are
11 investment opportunities and opportunities for innovation
12 in hemp. Across uses, hemp has been described as -- I
13 think there are like 25,000 different uses of hemp spanning
14 industrial uses, technology, plastics, and of course CBDs,
15 which we're here to talk about today.

16 So, we'd be happy to take your questions, again,
17 really appreciate the focus on this important topic.

18 MAJORITY CHAIRWOMAN RAPP: Thank you very much.
19 This was very informative. And I'd like to note the
20 presence of Representative Mary Jo Daley and Representative
21 John Hershey. Thank you for joining us.

22 And we will open this to questions at this time.
23 Secretary Levine, there are 23 categories, illnesses,
24 diseases which we allow to be treated by medical marijuana.
25 And included in that would be, you know, children under 18.

1 Do you have any concerns with the cannabis oil being
2 treated without -- as a treatment for our youth under 18?

3 What are the safeguards --

4 SECRETARY LEVINE: Sure.

5 MAJORITY CHAIRWOMAN RAPP: -- and are there
6 safeguards that you think that we need to look at that
7 maybe aren't there right now for our minors?

8 SECRETARY LEVINE: So, we have taken a very close
9 look at the conditions at the amount of young people under
10 18 for which medical marijuana is being recommended and the
11 conditions for which they're being recommended. There is
12 really limited use of medical marijuana for children under
13 18, but there are some specific indications. One of the
14 indications that really served as the basis for much of the
15 advocacy to the legislature for medical marijuana is use
16 for children with intractable seizures and epilepsy. There
17 are two specific conditions, Lennox-Gastaut syndrome and
18 Dravet syndrome, but there are others -- actually children
19 with absolutely intractable seizures that are not able to
20 be treated with other conditions for which CBD-rich medical
21 marijuana, which is different than the CBD in these hemp-
22 derived products, can have significant utility. And so one
23 of the conditions for which medical marijuana is being
24 recommended are those children.

25 Another condition approved by the legislature for

1 which medical marijuana is being recommended for children
2 is autism. There is less research about medical marijuana
3 and autism, but there is research. There's actually some
4 very promising research that was done, more observational
5 research by the Children's Hospital of Philadelphia and
6 some of their experts about medical marijuana with autism.
7 But certainly more research is necessary. And we're
8 advocating through our chapter 20 program and the academic
9 clinical research centers that we are encouraging
10 children's hospitals be doing that research associated with
11 the academic centers.

12 Other conditions, there are a small number of
13 children with cancer for which medical marijuana is
14 recommended, primarily teenagers who might have either
15 problems in terms of their appetite and eating, cachexia,
16 or nausea and vomiting associated with chemotherapy with
17 cancer. And there are some teenagers, not young children
18 but teenagers for which medical marijuana is being
19 recommended for particularly PTSD and then a small number
20 for anxiety. And PTSD of course was approved by the
21 legislature, cancer approved by the legislature, autism,
22 and of course those children with seizures.

23 I did approve anxiety disorder as one of the
24 conditions that was recommended to the board according to
25 the system that we have set up, to the Medical Marijuana

1 Advisory Board, for new conditions and then examined by our
2 medical subcommittee and then approved by the board,
3 recommended to me.

4 And then last year after a lot of research I did
5 approve anxiety. My caution was that I thought that and
6 some provisos to anxiety was that the literature suggests
7 that CBD-rich compounds, again, not the hemp compounds but
8 in the Medical Marijuana Program have shown promise for
9 anxiety and that I thought the indications for young people
10 under 18 were very limited for anxiety. And I made the
11 point that this should not be done as a first-line
12 treatment, but it wouldn't really be recommended after
13 other more traditional medications were considered, but
14 then also not as a replacement for counseling and therapy.
15 So, those were some of the guidelines. I mean, there's not
16 in the guidelines that I can enforce. Those were my
17 recommendations.

18 The other thing that the Medical Marijuana
19 Advisory Committee recommended to me that I have put on
20 hold is that medical marijuana should be recommended for
21 young people under 18 by pediatricians or by other
22 pediatric specialists. I haven't implemented that because
23 we don't have enough pediatric specialists that are part of
24 the program so that there wouldn't be a health equity issue
25 in terms of geography. So, we don't have enough pediatric

1 specialists in either neurology, pediatricians, adolescent
2 medicine, child psychiatry that have participated that it
3 wouldn't serve as a significant limitation to the public.
4 But I would like to do that if we can get more
5 pediatricians to register for the program.

6 MAJORITY CHAIRWOMAN RAPP: Just one follow-up,
7 since you mentioned pediatricians, so having said that,
8 then I'm just assuming that there are pediatricians across
9 the State who are prescribing medical marijuana and
10 possibly CBD oil for their minor patients?

11 SECRETARY LEVINE: Yes, there are. Of course, we
12 don't prescribe medical marijuana. You certify a patient
13 as having the condition and then approve them in the
14 program, but yes, there are pediatricians in the program or
15 pediatric specialists that are part of the program but not
16 enough for me to limit it for young people to pediatric
17 specialists in my opinion because it's not throughout the
18 State. It's only really particularly located in of course
19 our big cities.

20 MAJORITY CHAIRWOMAN RAPP: Thank you.
21 Representative Schemel, I think you had a question.

22 REPRESENTATIVE SCHEMEL: Yes, thank you. And,
23 Secretary, this may be a question for you, but you've
24 differentiated CBD as in the Medical Marijuana Program from
25 the products that are available as derivatives of hemp.

1 For those of us who don't understand, what's the
2 difference --

3 SECRETARY LEVINE: Sure.

4 REPRESENTATIVE SCHEMEL: -- and, as a follow-up
5 to that, the research that's being done within the Medical
6 Marijuana Program, does that pull over any of the CBD from
7 hemp so we know how these work together?

8 SECRETARY LEVINE: So, I'll answer the second
9 question first. No. The research in the Medical Marijuana
10 Program is being done through our Medical Marijuana
11 Program. The seven of the eight academic clinical research
12 centers, ACRCs, as per the act, have clinical registrants
13 that have been approved by the Department. One will have
14 another round four. For the seven that have approved,
15 those clinical registrants under the act will serve as
16 their grower/processor of medical marijuana and then serve
17 as their dispensary. And then they'll be working with that
18 academic center. We're in this area, so we'll say Penn
19 State, so they have a CR who will serve as their
20 grower/processor and their dispensary for that research.
21 None of it is being done with the CBD from hemp.

22 If you looked at a CBD molecule, you would not be
23 able to tell, I don't believe, whether it's from hemp or
24 from marijuana, but in terms of the way the products are
25 being distributed, it's completely different. Again, our

1 products have the license, regulated, the
2 grower/processors, dispensaries, the labs, all that
3 testing. The hemp industry and the hemp CBD, as we've been
4 discussing, is completely unregulated. It should be being
5 regulated by the FDA, but they are not enforcing
6 essentially any recommendations.

7 So, if you go to any of our great convenience
8 stores and gasoline stations, you will find CBD. There is
9 a great concern of what is in that product and where it was
10 grown, probably outside of Pennsylvania, how it was grown,
11 how safe it is, the quality control, and what is actually
12 in it. And in studies that have been done what they say is
13 in it is not what's in it. So, that's the concern.

14 MAJORITY CHAIRWOMAN RAPP: Thank you, Secretary.
15 Representative Knowles.

16 REPRESENTATIVE KNOWLES: Thank you, Madam
17 Chairman. And thank you, Madam Secretary, for being here,
18 Doctor. We certainly appreciate it.

19 I'll be up front. I was a "no" on medical
20 marijuana not because I didn't want to see people benefit
21 from it but because of the way it was done. It was not
22 something that was supported by the American Medical
23 Association, the Pennsylvania Medical Society, and a good
24 number of the medical associations. But what's done is
25 done. It's something that we need to live with and that we

1 need to be certain that we do in the right way.

2 One of the concerns that I had was that some of
3 the States were handing out medical marijuana cards the way
4 Santa Claus hands out candy canes at Christmastime. You
5 know, I was deeply concerned about that. But I understand
6 from what I hear that we're doing a pretty good job. And I
7 commend you for that.

8 SECRETARY LEVINE: Thank you.

9 REPRESENTATIVE KNOWLES: I commend you for that.

10 The concern or the question that I have is having a
11 Governor and a Lieutenant Governor who seem hell-bent on
12 legalizing recreational marijuana, I have concerns about,
13 first of all, there are people that are investing a lot of
14 money into medical marijuana, and I have concerns about
15 people that would just, you know, grab some pot and smoke
16 pot instead of getting medical marijuana. Do you have
17 concerns about the recreational element of marijuana? Do
18 you have concerns about the effect that that would have on
19 the people who have invested, as well as the medical
20 marijuana itself?

21 SECRETARY LEVINE: Thank you for that question.

22 There are a number of different parts. One is my goal with
23 the Medical Marijuana Program has been to keep this
24 medically and clinically based. And I did not want
25 Pennsylvania to become Venice Beach. You walk down Venice

1 Beach, California, and you cannot help but be dragged in by
2 somebody who said don't you want medical marijuana, here's
3 your card, here's your product, et cetera. And so we have
4 been able to thread the needle and to keep this a very
5 medically based program for patients with serious medical
6 conditions.

7 In terms of recreational marijuana, it really is
8 a completely separate discussion, and so the Governor and
9 Lieutenant Governor have supported recreational marijuana
10 because of the social justice issues and the justice issues
11 in terms of people who have had small amounts of marijuana
12 have been arrested, have been put in jail over many, many
13 years, and have had lives ruined. And so I think what
14 they've been asking for immediately is decriminalization of
15 marijuana so people don't go to jail and consideration of
16 some of those extreme sentences that have been done. And
17 the other is an economic issue in terms of the taxes that
18 could be developed.

19 In States that have had medical marijuana
20 programs and then have added recreational marijuana
21 programs, they have been able to continue robust medical
22 marijuana programs. A lot of it would have to do with the
23 tax structure and how it's taxed and many others. I think
24 the key would be the specifics about how the law was done
25 and how it was implemented, but I feel confident that we

1 would be able to continue our robust Medical Marijuana
2 Program even if recreational marijuana was legalized.

3 REPRESENTATIVE KNOWLES: Thank you very much.

4 SECRETARY LEVINE: Sure.

5 REPRESENTATIVE KNOWLES: I got the feeling that
6 both the Governor and Lieutenant Governor were talking
7 about legalization. They were talking about marijuana as
8 not being a crime.

9 SECRETARY LEVINE: The -- yes.

10 REPRESENTATIVE KNOWLES: So, I'm not hearing
11 about -- I'm hearing full legalizing marijuana, and that
12 scares the hell out of me.

13 SECRETARY LEVINE: So, the first thing they
14 talked about was decriminalization, and then they did talk
15 about legalization of marijuana. But again, from a social
16 justice point of view and from an economic point of view.

17 REPRESENTATIVE KNOWLES: Thank you, Madam Chair.

18 SECRETARY LEVINE: Sure.

19 REPRESENTATIVE KNOWLES: Thank you.

20 MAJORITY CHAIRWOMAN RAPP: Thank you,
21 Representative. Thank you, Secretary Levine.

22 SECRETARY LEVINE: Thanks.

23 MAJORITY CHAIRWOMAN RAPP: Representative Brad
24 Roae.

25 REPRESENTATIVE ROAE: Thank you, Madam

1 Chairwoman, and thank you, Secretary. My question is
2 regarding, you know, Governor Wolf and Lieutenant Governor
3 Fetterman have both, you know, advocated for making
4 marijuana, you know, recreational, legal. My question is
5 how would a State law be designed that was somehow
6 supersede a Federal law that says marijuana is illegal?
7 And if we did do that somehow, what impact would that have
8 on hemp and CBD oil? By supersede I mean, you know,
9 Federal law supersedes State law, so like we can't pass a
10 State law that says you drive on the left-hand side of the
11 road because the Federal law says you drive on the right
12 side of the road. So, the Federal law says all marijuana
13 is illegal. How do we pass a State law that basically does
14 away with a Federal law?

15 SECRETARY LEVINE: So, I'm not an attorney, and
16 so I'm not the expert in terms of the legal system of
17 Federal laws and State laws. Of course, we did pass and
18 have implemented a medical marijuana law in the face of it
19 still being a DEA schedule I substance. And there have
20 been, I believe, 13 States that have done that. But I'm
21 not the right person to ask about the legal aspects of it.
22 My job has been to implement the Medical Marijuana Program.

23 Again, other States that have gone from a Medical
24 Marijuana Program and then legalized nonmedical marijuana
25 or legalized recreational marijuana have been able to

1 continue robust Medical Marijuana Programs. A lot of it
2 would have to be due to the specifics of how it is
3 implemented and how it would be taxed. And so we'd have to
4 have a robust discussion with many policy experts about how
5 to do that, but I feel confident that we could continue our
6 Medical Marijuana Program. But in terms of the legal
7 aspects, I'll defer to you all and the lawyers.

8 REPRESENTATIVE ROAE: Thank you.

9 MAJORITY CHAIRWOMAN RAPP: Thank you,
10 Representative, Secretary. Representative Daley.

11 REPRESENTATIVE DALEY: Thanks, Madam Chair. I
12 should also say that I served on the Medical Marijuana
13 Working Group. I think that was in 2016 we were working on
14 that. And I just have to say that it's really heartening
15 to hear you speak about it, Dr. Levine, because I think
16 you're talking about it exactly the way that those of us
17 who worked on that wanted to see it happen.

18 But my question is actually about hemp and the
19 research. So, on the Medical Marijuana Committee I was one
20 of the legislators who was really interested in seeing
21 research done because we could do research in Pennsylvania,
22 but it hadn't been able to be done on medical marijuana for
23 all of these years. You know, the Federal Government
24 wouldn't support research, so we thought that we had an
25 opportunity to actually add to the knowledge.

1 So, now in the hemp area where we seem to be a
2 real leader -- and you mentioned in the PowerPoint I saw
3 that there was a 2017 Pennsylvania pilot research program,
4 the Pennsylvania Farm Bill had a specialty crop block
5 grant. So, could you talk a little bit about what the
6 research has focused on? Because one of the things that I
7 kept hearing when we were talking about hemp originally was
8 this excitement that it was a crop that was kind of an
9 ancient crop and being able to be brought back in a legal
10 kind of way and all of the different uses.

11 The CBD obviously is of great interest, and I'm
12 very happy to hear that we're all in agreement that that
13 needs to be looked at. But I am interested in generally
14 what kind of research is being done, and are those dollars
15 being accessed for hemp research?

16 MS. KRAK: Sure. I appreciate the question.
17 Secretary Redding often talks about how this is a crop that
18 we lost about 70 years of any experience, and imagine --
19 you know, we've seen so many advances in agronomy for crops
20 such as, you know, corn or soybeans and we've lost that
21 with hemp. Some of the research in the beginning was
22 literally how do you grow this? If you get it to grow, how
23 do you harvest it? The fiber varieties are incredibly
24 strong and will -- you know, the first year we saw them
25 taking combines apart. So, there's specialized equipment

1 that is needed. There are agronomic principles that we
2 need to keep working on just to successfully grow hemp.
3 And then you have a lot of research that is needed on how
4 to utilize it in all of its forms. So, I think the
5 beginning of the research program was pretty basic and just
6 how do we get this crop to grow and what are the different
7 impacts of various growing conditions.

8 One thing we found last year is that hemp that's
9 grown in Canada or in Colorado, they have very different
10 growing conditions, different soil, and that can have an
11 impact on even the THC levels or the CBD levels of the
12 final crop. So, that's part of why we're really happy to
13 have both a prohibited variety of, you know, plants that
14 just did not work in Pennsylvania and are not hemp, as well
15 as those varieties of concern so that you can see this many
16 growers last year had an issue of being over the .3 percent
17 to help provide more information to our growers as they're
18 making these business decisions.

19 For the Specialty Crop Block Grant Program, we
20 had that available for especially on the agronomic side,
21 research in that vein. I'm not as familiar with what the
22 other allowable uses are, but we can certainly get back to
23 you with that program. That is part of the Governor's
24 request in the budget again this year, to fund that program
25 again.

1 MR. STRATHMEYER: So, just to tag-team a little
2 bit, you have to remember, as Natalie said, the public
3 hasn't seen this crop in 80 years, so a couple three
4 generations. One of the challenges that the hemp growers
5 have is in fact the marketplace itself, identifying the
6 market. And also a lot of the infrastructure that is
7 required whether, you know, from -- once you have a
8 processor, that's not the end of the product line, the
9 supply chain. There typically are two or three steps
10 beyond that.

11 I had the good fortune last week of being out in
12 the Pittsburgh area. There's a plastics manufacturer out
13 there that we are now talking to that is telling me that he
14 just needs -- he's very interested. It's on their radar.
15 But there are pieces of this research that you're referring
16 to that need to happen for this industry.

17 If I can tell you one thing, what I'm hearing
18 around the State is that although the CBD in the hemp area
19 seems to be an area of we'll call the quick dollars,
20 sustainability is going to be in the fiber, and I'm very
21 strongly believing that the more I get around the State,
22 the more I get around the product, I believe very strongly
23 that our sustainability is going to be in the fiber and not
24 necessarily in the CBD.

25 REPRESENTATIVE DALEY: So, I went to the

1 Pennsylvania Farm Show, as I'm sure many of us did, and the
2 hemp display I thought was one of the more interesting
3 because it's new, but the variety of products was just
4 really fascinating, and the fabric was very nice. But it
5 was more than fabrics. It was just all kinds of different
6 items. So, I really appreciate the fact that we have this
7 hearing today. It's really interesting. And it gives the
8 farmers new things to be growing.

9 MAJORITY CHAIRWOMAN RAPP: Thank you,
10 Representative. Thank you, Members.

11 I'd like to note the presence of Representative
12 Jim Cox, who, by the way, was very instrumental in the
13 medical marijuana bill. Jim, I hope you don't mind me
14 saying that, but I know you were up front with that.

15 So, Representative Zimmerman.

16 REPRESENTATIVE ZIMMERMAN: Thank you, Madam
17 Chair, and I appreciate the testimony this morning. I just
18 want to give a shout out to both Deputy Secretary
19 Strathmeyer and also Natalie as Policy Director for a
20 really well done presentation, so it was well done, good
21 information.

22 My question is really for Dr. Levine, and that
23 revolves around -- so marijuana-derived CBD, does all of
24 that contain some level of THC?

25 SECRETARY LEVINE: Yes.

1 REPRESENTATIVE ZIMMERMAN: All right. Thank you.

2 MAJORITY CHAIRWOMAN RAPP: That was quick,
3 Representative.

4 Representative Schlossberg.

5 REPRESENTATIVE SCHLOSSBERG: Thank you, Madam
6 Chair. And thank you, Madam Chair, for holding this
7 hearing. Thanks to all of you. This is really
8 interesting. It's an area that I've gotten involved with a
9 little bit, and it's something that I hope people
10 understand is really important to our constituents.
11 There's survey data out there that's six months old now
12 that shows one in seven Americans have tried CBD, and we
13 know that number is only going to keep going through the
14 roof.

15 Two questions, and the first one, Dr. Levine,
16 I'll address to you. There is research that shows that CBD
17 can potentially help with a variety of physical and
18 emotional ailments, but there are also concerns about its
19 drug interaction and long-term impact on liver function.
20 As medical practitioners, is this a concern of yours, and
21 is there anything we can or should be doing about it right
22 now as we have these conversations?

23 SECRETARY LEVINE: Sure. So, all medications
24 have their benefits and they have their potential side
25 effects, including many over-the-counter medications that

1 we commonly buy. And so that isn't new that medical
2 marijuana as a medicine will have benefits and have some
3 potential side effects. And so I think that we need more
4 research about the benefits, about the side effects of CBD-
5 rich medical marijuana, medications, or CBD medications
6 from hemp, and we need more research about more THC-rich
7 medications.

8 And so that is the beauty of the Chapter 20
9 program. I think that, you know, it's just getting
10 started. Some of the CRs were approved about two weeks
11 ago. But I'm hoping that as the clinical research program
12 matures over the next number of years that Pennsylvania
13 will actually be one of the national leaders in medical
14 marijuana research, including the benefits and including
15 the side effects.

16 REPRESENTATIVE SCHLOSSBERG: And we would
17 actually need separate law for CBD-related research, right,
18 because the research you've been discussing is explicitly
19 related to medical marijuana?

20 SECRETARY LEVINE: No.

21 REPRESENTATIVE SCHLOSSBERG: No?

22 SECRETARY LEVINE: So, the CBD-rich medical
23 marijuana in our program will be researched by the ACRCs,
24 and so, you know, when you go to a dispensary, there are
25 many different medical marijuana strains and many different

1 ratios of compounds, and so there are particularly CBD-rich
2 compounds. They do contain some THC, but they are
3 particularly rich in CBD. And those will be researched.
4 If you want to do research on CBD from hemp, you can buy
5 that in Pennsylvania. You'd probably want to have a
6 distributor where you know -- not getting it from Turkey
7 Hill but to get it from a known distributor -- nothing
8 against Turkey Hill -- but that you would get it from a
9 known, you know, distributor and know what you're -- I
10 mean, with any research, you want to know exactly what's in
11 it. And you could do that anytime.

12 REPRESENTATIVE SCHLOSSBERG: And that's actually
13 my second related question as it comes to the commercial
14 sale of CBD. I know, ideally, regulations should come from
15 the Federal level when it comes to labeling requirements
16 and regular testing, and we desperately need regular
17 testing. It sounds like State action may be necessary
18 because the FDA has said it could take up to five years for
19 them to get more involved with labeling. Fortunately, if
20 I'm understanding correctly, there are private companies
21 that do some of this testing and they can certify what's in
22 CBD.

23 We're having conversations about labeling and
24 about testing. Has anybody had the conversation across the
25 Nation about whether or not States should get more involved

1 in regulating the sale of CBD like selling it in a grocery
2 store given that there are medical interactions?

3 SECRETARY LEVINE: I --

4 REPRESENTATIVE SCHLOSSBERG: And is that
5 something that's appropriate? I don't know.

6 SECRETARY LEVINE: So, again, different States
7 have done different things, but, I mean, no one has maybe
8 done it best yet. But I think that that would be one of
9 the issues. I think that the labeling, the quality control
10 is critical with these compounds because whether the FDA
11 says that they're not medicines, they're being used as
12 medicines.

13 REPRESENTATIVE SCHLOSSBERG: And you could buy
14 them off the internet right now.

15 SECRETARY LEVINE: Exactly. And, again, nothing
16 is saying that those compounds that you buy at the
17 convenience store are made in Pennsylvania. They could be
18 made anywhere. And so that's another issue in terms of our
19 industry is that those compounds are made throughout the
20 country.

21 MS. KRAK: Yes, just to jump in on the discussion
22 about research, Secretary Levine is absolutely correct.
23 You can do research on hemp-derived CBD today. We would
24 certainly encourage working with Pennsylvania growers, and
25 to do that they would just need a permit, same with

1 Pennsylvania processors. We think there's a lot of
2 opportunities there, but it's a fair point, you know, a lot
3 of the CBD products that you see in grocery stores, there
4 is no labeling or requirement of a State identification.
5 Much of the product could be from Colorado or other places,
6 but we would certainly encourage working with Pennsylvania
7 growers and processors.

8 REPRESENTATIVE SCHLOSSBERG: Because there is
9 nothing that could stop somebody from throwing something in
10 a bottle, labeling it as CBD, putting it in a gas station,
11 and saying this is CBD.

12 MS. KRAK: No. I would say the limitations are
13 it is illegal to say that there are medical applications
14 for it --

15 REPRESENTATIVE SCHLOSSBERG: Right.

16 MS. KRAK: -- and it is illegal to put it in food
17 and beverages per the FDA.

18 REPRESENTATIVE SCHLOSSBERG: But other than those
19 pretty broad restrictions, everything I -- that's pretty
20 frightening.

21 SECRETARY LEVINE: The other point I want to make
22 is that the laboratories that we use, the six, I believe,
23 laboratories that are approved to test our product would be
24 extremely pleased, I am sure, to get the business to test
25 the product from hemp and could do that.

1 REPRESENTATIVE SCHLOSSBERG: Yes.

2 MS. KRAK: I do think one follow-up, we've had a
3 lot of discussion about how there is no regulation on the
4 hemp-derived CBD side, and I just want to make clear that
5 is not because hemp growers or processors for the large
6 majority are trying to do anything nefarious or avoid any
7 sort of regulation. I think you'll hear later from other
8 panelists that folks within the industry are taking this
9 lack of regulation very seriously and in some instances are
10 instituting their own testing and things like that. There
11 is a need for ideally Federal action and the standard
12 across the States, but lack of Federal action may lead to a
13 patchwork of States.

14 REPRESENTATIVE SCHLOSSBERG: Thank you very much.

15 MAJORITY CHAIRWOMAN RAPP: Thank you.

16 Representative Gaydos.

17 REPRESENTATIVE GAYDOS: So, if I understand that
18 the Department of Agriculture issues permits that allow
19 hemp producers to produce CBD with THAT'S CORRECT in it?

20 MS. KRAK: Yes. So, we regulate the growth of
21 hemp, including varieties that hemp is going to have THC in
22 it up to .3 percent THC. That's the legal limit for hemp.
23 So, whether you're growing for fiber or for CBD, you need a
24 permit from us in order to grow. There are some
25 restrictions, like you can't grow for personal use. You

1 have to be growing for a commercial-level production. And
2 we this year started permitting processors so that we're
3 aware of who is doing processing, whether that's for
4 industrial uses or for CBD.

5 REPRESENTATIVE GAYDOS: So, who tests for the
6 THC?

7 MS. KRAK: We do at the Department of Ag's
8 laboratory, but then we also have contracts -- or folks can
9 contract with private labs around the country.

10 REPRESENTATIVE GAYDOS: And then what else do you
11 test for? You know, do you test pesticides, metals,
12 bacteria?

13 MS. KRAK: At this time the only tests required
14 at the Federal level is a THC test.

15 REPRESENTATIVE GAYDOS: Okay. And I have a
16 second question. I understand that in the regulations it
17 says it has to pass a certified sampler. What are the
18 qualifications to become a certified sampler?

19 MR. STRATHMEYER: So, we're currently working on
20 that. It's part of the interim rule.

21 REPRESENTATIVE GAYDOS: Okay.

22 MR. STRATHMEYER: Essentially, what we're going
23 to say is that we're going to follow the guidelines that
24 DEA has put out, but what we're looking for and have
25 actually been approached by other people in agriculture

1 that are certified examiners or certified inspectors, milk
2 inspectors, you know, people that inspect honey, other
3 people that already have that mindset are a lot of the
4 people that we're, you know, being approached by and saying
5 can we be. So, we're setting those guidelines currently
6 and hope to have those guidelines out here very shortly,
7 but yes.

8 REPRESENTATIVE GAYDOS: So, currently, there's no
9 definition of certified --

10 MR. STRATHMEYER: And there never was.
11 Understand, Representative, that is a whole new piece --

12 REPRESENTATIVE GAYDOS: Got you.

13 MR. STRATHMEYER: -- of the interim rule. That
14 is nothing that we were required to do before. That is all
15 part of the new requirements of the interim rule. So, it's
16 not that we weren't. And then, quite frankly, even taking
17 samples themselves, the farmers actually were the ones that
18 took their own sample, took it to a laboratory, got it
19 tested or sent it in to us. We did some auditing basically
20 at the Department. We gathered samples ourselves. So,
21 that whole area has kind of been built around a little
22 better rails right now.

23 REPRESENTATIVE GAYDOS: And, no, I mean, I
24 commend you all for addressing this, so thank you.

25 MR. STRATHMEYER: Yes.

1 MAJORITY CHAIRWOMAN RAPP: Thank you,
2 Representative.

3 Representative DeLissio.

4 REPRESENTATIVE DELISSIO: Thank you, Chairwoman.

5 Deputy Secretary, is there currently a charge for
6 permits now?

7 MR. STRATHMEYER: Yes. The new charge this year
8 is \$150. Last year, it was \$600. The year before that it
9 was \$2,000, and the year before that or within that same
10 year it was \$3,000.

11 REPRESENTATIVE DELISSIO: So, it is currently
12 \$150?

13 MR. STRATHMEYER: Currently \$150 --

14 REPRESENTATIVE DELISSIO: Is that --

15 MR. STRATHMEYER: -- and that is for farmers as
16 well as processors. It's the same number.

17 REPRESENTATIVE DELISSIO: And is that an annual
18 permit that somebody has to --

19 MR. STRATHMEYER: Correct.

20 REPRESENTATIVE DELISSIO: -- apply for and remit?

21 MR. STRATHMEYER: Correct.

22 REPRESENTATIVE DELISSIO: So, \$150.

23 MR. STRATHMEYER: And, again, Representative,
24 that is under the guidelines and the guise that we're
25 playing by today. It's not to say that depending on the

1 Federal Government, if they come back with different rules
2 as a final rule that we wouldn't adjust to that.

3 REPRESENTATIVE DELISSIO: So, then are those
4 permits issued to individuals or can they also be issued to
5 organizations or companies? Because I see there's, you
6 know, about 300 permits, 800-some growing locations --

7 MR. STRATHMEYER: So --

8 REPRESENTATIVE DELISSIO: -- so obviously
9 somebody has multiple growing locations.

10 MR. STRATHMEYER: So, this year what we're doing
11 is it's going to be by the location quite frankly. So, if
12 you have three locations on your farm, that's still one
13 permit. If you have a location here and down in the next
14 county you've got another location, in the next county
15 you've got another, then that's three permits. The idea
16 here is that we need to know where the product is.

17 One piece of this that we haven't really
18 discussed much is law enforcement. They are also at the
19 table in this workgroup that Secretary Levine has talked
20 about. Law enforcement is there as well. And so we are
21 making sure that because a lot of times the burden becomes
22 part of their problem, whether, you know, they see the
23 product -- remember, marijuana and hemp, they look the
24 same, and so when law enforcement is dealing with it,
25 they're dealing with a plant that looks the same. So,

1 we're trying to do our best to make sure that all parties
2 are working together here.

3 REPRESENTATIVE DELISSIO: You mentioned that the
4 processors must be permitted now, but you used the phrase
5 "to their front door." Does that mean that you don't go
6 inside to inspect a processing plant? I mean, was that
7 literal?

8 MR. STRATHMEYER: So, again, the answer is sort
9 of kind of yes. The answer is that our jurisdiction does
10 not allow us to -- whatever is going on inside the
11 processing plant is not in our purview. So, to
12 Dr. Levine's point about where this gets a little bit gray
13 is that the raw material is delivered to the processor.
14 They get the proper documentation, i.e., they have to buy
15 it from a permitted grower, and the permitted grower has to
16 have documentation that the material has been tested. Once
17 that happens, it's their product. They take it inside, and
18 they process it. It is the part of this action that we
19 don't have any control of the CBD material that comes out
20 of the back side. Hence, you know, the Representatives
21 relating to, you know, what's in it or what's not in it,
22 that's part of the issue, and that's where we are
23 continuing to hope for better guidance from FDA and our
24 Federal partners.

25 But in the meantime I can tell you, as Natalie

1 said, our growers are really good growers. They're good
2 people. There is no intention of showing up at the door
3 with the wrong material. So, we're very proud of our
4 growers here in the State of Pennsylvania. They've really
5 stepped up and followed the rules.

6 MS. KRAK: Sorry. Just to add to that a little
7 bit, with USDA's interim final rule, their jurisdiction
8 ends at the farm gate. Their sole concern is whether that
9 is compliant with a THC test. Part of why we have
10 continued to work methodically at our program is because
11 the Feds are making decisions and changes that, as Fred
12 mentioned, have impacted some other States that have passed
13 laws. So, we have taken it a step farther to actually
14 track that plant material to the processor level so that we
15 can make sure that plant material going in is not only
16 compliant with THC tests but also that if folks are
17 disposing of seeds, that they're not just getting dumped
18 into a compost pile and then we have hemp sprouting in
19 areas that aren't permitted.

20 So, that's part of our rationale for why we
21 extended. At the State level we actually took it a step
22 further to be aware of those processors. That helps out
23 law enforcement, as well as making sure that the product is
24 compliant with the rules that we have to date.

25 REPRESENTATIVE DELISSIO: And I'd be curious if

1 anybody has applied to the PA preferred program for any
2 product to be approved under that --

3 MR. STRATHMEYER: We have.

4 REPRESENTATIVE DELISSIO: -- or stamped under
5 that program for hemp --

6 MR. STRATHMEYER: We have, and the answer is no.

7 REPRESENTATIVE DELISSIO: -- or CBD. They have
8 applied, but the answer has been no?

9 MR. STRATHMEYER: Because, typically, the
10 products, as you know, the PA preferred program, it would
11 be juice or something like that where it would end up being
12 a product, a food product. And, as Natalie and myself have
13 both said today is that is not allowed, and currently
14 that's the stand that the State is taking is that we can't
15 allow it -- of our own knowledge allow it to be in that
16 food product.

17 REPRESENTATIVE DELISSIO: Thank you, Madam Chair.

18 MAJORITY CHAIRWOMAN RAPP: Thank you,
19 Representative.

20 At this time my Executive Director has a few
21 comments, questions, and that'll be the final for this
22 panel. And so, Whitney, go ahead.

23 MS. METZLER: Well, actually, I have a number of
24 questions, but this is being offered to the Members. As
25 usual, if you have any questions that come up later for

1 this panel and they have left, email either Eric or I and
2 we will send it off to the departments and happily get you
3 an answer as usual.

4 So, the hot crop that you had referenced -- and
5 there's the destruction of it -- is there any interaction
6 or has there been any discussion at the administrative
7 level for interaction between the hemp product that is sold
8 and is now deemed hot, so therefore, I'm assuming the THC
9 level of above .3 percent, and any interaction with the
10 Medical Marijuana Program? Because it seems like these are
11 two programs that are operating side-by-side that really
12 could have a collaborative relationship.

13 SECRETARY LEVINE: So, under the law there can
14 only be a certain number of grower/processors that are
15 participating in our Medical Marijuana Program, I believe
16 25 grower/processors. And then we had round one and round
17 two to produce those. And so we would not be participating
18 with any other grower/processors besides those that went
19 through the full RFA, two rounds of RFAs to be approved.
20 And then there are the clinical registrants through another
21 approval process. So, we would not be accepting any
22 product from any other farm. Under the law it has to be
23 under the grower/processors in that system.

24 MAJORITY CHAIRWOMAN RAPP: Thank you, panel.
25 This was very informative. I think we probably have more

1 questions now than when we started, but this was very
2 informative. You are very knowledgeable, and we truly
3 appreciate your time in attending today.

4 MR. STRATHMEYER: Thank you. Thank you for
5 having us.

6 MAJORITY CHAIRWOMAN RAPP: And we may ask you
7 back.

8 MS. KRAK: That's fine.

9 MR. STRATHMEYER: Thank you for having us.

10 MS. KRAK: Thank you so much.

11 MAJORITY CHAIRWOMAN RAPP: Thank you. Our next
12 testifiers and panel is Billy Woolf, who is the Chief
13 Operating Officer for the Steep Hill Laboratory of
14 Pennsylvania. Gentlemen, please have a seat. And, Dr.
15 Steve Groff, who is the founder and Chairman of Groff North
16 America.

17 So, Mr. Woolf, are you going to be the first
18 presenter?

19 MR. WOOLF: If that's okay.

20 MAJORITY CHAIRWOMAN RAPP: That's fine.

21 Whatever. So, proceed whenever you're ready, sir.

22 MR. WOOLF: Thank you. Chairman Rapp and Members
23 of the House Health Committee, my name is Billy Woolf. I'm
24 the Chief Operating Officer of Steep Hill, Pennsylvania, a
25 licensed medical cannabis testing laboratory. I appear

1 here today on behalf of the Pennsylvania Cannabis
2 Coalition.

3 In sharp contrast to our Pennsylvania medical
4 marijuana law, which brought access to high-quality
5 cannabis products to patients through a controlled and
6 regulated supply chain, the de-scheduling of CBD in the
7 2018 Farm Bill unleashed a flood of hemp-derived CBD
8 products to an unregulated retail market with unprepared
9 consumers. The legal and social stigma of over 80 years of
10 cannabis prohibition have left a huge knowledge gap in our
11 understanding of the cannabis plant and its uses.

12 Confusion abounds as our citizens lack the confidence to
13 make important choices about new treatment options that may
14 improve their own health. As stakeholders in the well-
15 being of every Commonwealth citizen, now is the time to
16 raise our own awareness of the plant's beneficial
17 properties and uses if we are successfully to advance
18 meaningful new law and policy.

19 A proud son of Harrisburg, I grew up just a few
20 blocks up the street on this very same North 3rd Street,
21 but I took the path less traveled to get here today for
22 this special trip downtown. Along the way, I've earned
23 degrees in analytical chemistry, biomedical engineering,
24 and project management, attended law school, worked
25 professionally in medical research and data consulting, and

1 owned and operated a steel construction business for over
2 25 years here in central Pennsylvania.

3 Without any good options for cannabis training a
4 few years ago, I assembled a curriculum of my own from few
5 resources. Industry certification as a patient-focused
6 certification verified professional through the Americans
7 For Safe Access validates my training in best practices.
8 And the Oaksterdam Cultivation and Business Programs
9 highlights the breadth of my industry preparation. Whether
10 it be destiny or career renaissance, it is truly satisfying
11 to work in a new field that requires me to use every one of
12 my technical and business skills in the operations and
13 compliance work I perform daily as a cannabis professional.

14 And now, as an educator, I pay this knowledge
15 forward as an adjunct professor of medical cannabis
16 education at HACC, central Pennsylvania's community
17 college, where I prepare passionate students with the
18 workforce skills needed to succeed in this exciting yet
19 challenging new industry.

20 Thank you for the opportunity to provide my
21 testimony before you today.

22 Generally speaking, there are two important types
23 of plants in the world of cannabis: medicinal plants and
24 hemp plants. Industrial hemp plants are grown for fiber
25 and hempseed oil. Medicinal plants include both

1 psychoactive THC-rich plants and non-psychoactive CBD-rich
2 plants. The main difference between hemp and medicinal
3 plants is the amount of resin they produce. Hemp plants
4 are low-resin plants, and medicinal plants are high-resin
5 plants.

6 Industrial hemp varieties are typically a low-
7 resin agricultural crop, grown from pedigree seed, with
8 about 100 tall, skinny plants per square meter, machine-
9 harvested and manufactured into a multitude of products.
10 Medicinal plants are a high-resin horticultural crop,
11 typically grown from asexually reproduced female clones,
12 one to two plants per square meter, hand-harvested, dried,
13 trimmed, and cured.

14 The modern era of medical marijuana began in the
15 early 1960s with the isolation of CBD and THC molecule by
16 Dr. Raphael Mechoulam, an Israeli scientist. Inspired by
17 centuries of anecdotal evidence of cannabis healing,
18 Mechoulam's research group continued to uncover the
19 relationship between beneficial plant compounds and their
20 physiological interactions within the endocannabinoid
21 system within our bodies. Dubbed the father of medical
22 marijuana, Mechoulam's work was peer-reviewed and accepted
23 by the scientific and medical communities in 1992, which
24 led the way for California to become the first State to
25 legalize medical marijuana in 1996.

1 Pure THC and CBD are both odorless and colorless
2 at room temperature, have the same molecular formula and
3 molecular weight, but are found only in small amounts in
4 the raw plant. They are just two compounds from a family
5 of around 113 cannabinoid compound found naturally in
6 cannabis. Only a slight difference in molecular structure
7 is what gives the two compounds entirely different
8 pharmacological properties. The final products of THC and
9 CBD are actually converted via a chemical process called
10 decarboxylation, from their acid form precursor THCA and
11 CBDA, which are produced in much larger amounts by the
12 plant.

13 The main difference between THC and CBD is that
14 THC is psychoactive, and CBD is not. CBD has significant
15 medical benefits and can actually counteract the
16 psychoactivity of THC. This makes CBD an appealing
17 treatment option for patients seeking antiinflammatory,
18 antipain, antianxiety, antipsychotic, or antispasmodic
19 effects without troubling lethargy or dysphoria. Though
20 psychoactivity can be seen by some as an undesirable side
21 effect, THC on its own is used effectively in many ways as
22 an analgesic, antinauseant, antianxiety, appetite
23 stimulant, sleep aid, and to reduce the chronic pain of
24 muscle spasticity.

25 THC and CBD are the power couple of cannabinoid

1 compound because they work best together. Scientific
2 studies have established that CBD and THC interact
3 synergistically to enhance each other's therapeutic
4 effects. CBD combined with THC require lower effective
5 doses, have a wider therapeutic window, potentiate THC's
6 antiinflammatory properties, has a more potent antitumoral
7 effect in certain cancer treatments, and is more beneficial
8 for neuropathic pain than either compound as a single
9 molecule.

10 In addition to THC and CBD, cannabis contains
11 several hundred compounds, including various flavonoids,
12 aromatic terpenes, and many minor cannabinoids. Each of
13 these compounds has a specific healing property, but, when
14 combined, they create what scientists refer to as an
15 entourage effect where the therapeutic impact of the whole
16 plant is greater than the sum of the individual parts.

17 While it may be possible to extract CBD from some
18 low-resin industrial hemp cultivars, fiber hemp is
19 considered a poor source of CBD because it typically
20 contains far less CBD and lacks critical medicinal terpenes
21 and other plant compounds that interact with CBD and THC to
22 enhance their therapeutic effect. Huge amounts of
23 industrial hemp are required to extract even a small amount
24 of CBD, thereby raising the risk of contaminants because
25 hemp is a bioaccumulator that can draw harmful substances

1 from the surrounding soils.

2 Unfortunately, the lack of oversight in
3 manufacturing hemp-derived CBD products has led to
4 confusion, deception, and contamination. Blind testing of
5 unregulated hemp-derived products has found that many are
6 mislabeled as to CBD and THC content. Poorly processed CBD
7 products may be contaminated with dangerous solvent and
8 pesticide residues, heavy metals, microbiological threats,
9 thinning agents, corn syrup, artificial flavors and colors,
10 and other toxins.

11 Until confidence in retail CBD products can be
12 assured through a program that includes laboratory testing,
13 we encourage citizens with qualified conditions seeking CBD
14 therapy to register in the safety of the Medical Marijuana
15 Program. Doctors and pharmacists and other skilled
16 professionals are already available to guide and train new
17 patients toward micro-dosed therapies with low or no
18 psychoactivity. However, well-intending citizens who may
19 not qualify for the program ironically remain at risk of
20 harm from unregulated retail products.

21 Thank you again for your invitation to appear
22 today, and I welcome any questions you may have.

23 DR. GROFF: Good morning. I want to thank the
24 Chair and Committee Members for this opportunity to speak
25 with you today about hemp, cannabis, and our company's

1 efforts in this space and our vision of the tremendous
2 opportunities for the Commonwealth and its citizens. I
3 would like to think that we can shed some more light on
4 some of the controversial discussion that's taken place
5 here so far.

6 A quick background on myself, I was born in a
7 farming family in Lancaster, Pennsylvania, a Pennsylvania
8 native. I decided to go another direction from dairy
9 farming. I forged a path into medicine, graduating from
10 Albright College, University of Virginia, and I completed
11 my orthopedic surgery training at Penn State University at
12 the same time that Dr. Levine was there, so we crossed
13 paths at Hershey for a number of years.

14 I built a clinical spine practice in York,
15 Pennsylvania, starting in 1996. Along with clinical
16 practice, I took an active role in leadership and
17 development, ultimately resulting in the formation of OSS
18 Health, now one of the premier musculoskeletal practices in
19 the mid-Atlantic. Within a year of opening that hospital
20 and developing it into a freestanding health system, I was
21 struck by a motorist on my bicycle at 45 miles an hour
22 sustaining a number of injuries. The most serious was an
23 unstable cervical fracture with bleeding around the spinal
24 cord. And me as a spine surgeon, that was pretty scary.

25 I was fortunate to recover but unable to continue

1 the surgical practice. So, in finding an act two in life,
2 I joined with my family and developed an agritourism
3 business and beverage business on Wyndridge Farm, an 80-
4 acre farm in southern York County where my wife and I
5 raised our kids. You can see a picture of it there on the
6 screen. Since its 2014 opening, it's become an East Coast
7 destination.

8 With my medical credentials intact -- I'm a
9 board-certified orthopedic spine surgeon and licensed in
10 Pennsylvania -- 2017 found me looking for some next steps
11 in life, and I began to study cannabinoids, CBD, and hemp.
12 And after seeing an opportunity with the 2018 Farm Bill, we
13 decided to enter the space. Our family started a business
14 called Groff North America, which is an integrated agritech
15 company based on hemp. We have utilized the thesis of
16 using the entire plant for seed nutritional value, medical
17 use from cannabinoids, and industrial use of fiber from the
18 stalk. We've built out a platform that has quickly pushed
19 us into a leadership position in this space both in
20 Pennsylvania and beyond.

21 Our team consists of experts from medicine,
22 medical device manufacturing, industrial organic chemistry,
23 and cannabinoids. We have invested heavily in creating a
24 research park complex in York, Pennsylvania, specifically
25 Red Lion, a town that was once a proud cigar-producing

1 actually capital of the country. And it's fallen on some
2 tough times, and we're proud to be there.

3 We have acquired advanced technologies that will
4 help us lead this industry both in the cannabinoid side, as
5 well as the fiber side. We've developed Farmacy Partners,
6 a retail and clinical arm with a flagship location in York
7 and six new locations set to open in 2020. I have
8 developed a clinical medical practice based on research,
9 education, and treatment of patients with multiple
10 conditions using hemp-based cannabinoids, which I need to
11 point are the exact same molecules in the high-THC cannabis
12 plant, as well as low-THC known as hemp. And that is
13 something I really want to emphasize as we try to educate
14 folks here making legislation.

15 Farmacy Medical Advisors is a physician group
16 that we formed consisting now of six clinicians from
17 Pennsylvania, among them sharing eight board
18 certifications. This group expects to receive a Federal
19 clinical research permit for a number of studies involving
20 these molecules.

21 Over the last 15 months we have counseled,
22 treated, and followed hundreds of patients, gaining
23 invaluable direct insight into patient results. This
24 community resource has been very well-received and will be
25 expanding into Hanover and Lancaster by May 2020.

1 Our commitment to whole-plant utilization has led
2 us to work with Pennsylvania farmers and grow 2,000 acres
3 of what we call dual-purpose hemp crop in 2019. That was
4 50 percent of the hemp grown in Pennsylvania this past
5 year. This was the largest growth of this type of cultivar
6 in 80 years in Pennsylvania. Our State was once home to
7 the largest U.S. hemp growth in the 1940s and is known as
8 Hempfield, Lancaster County, today.

9 We feel that Pennsylvania is poised to help guide
10 this entire industry forward given the progressive policies
11 implemented by the Department of Agriculture and Secretary
12 Redding. Obviously, we heard from Secretary Strathmeyer
13 earlier. They allowed unlimited acreage to permittees and
14 also had prompt development of a USDA-approved hemp plan.

15 Our hemp research park, known as Hemplex, has a
16 cannabinoid laboratory which will be opening in April, and
17 this will feature leadership by myself and renowned
18 scientist Dr. Dan Batzel, a Scranton native and organic
19 chemist. Under his direction, our facility will feature
20 the most advanced and environmentally friendly extraction,
21 isolation, and formulation capabilities in the industry.
22 We are building a pharma-grade facility that meets or
23 exceeds any of the medical cannabis programs in the
24 country.

25 It is important to note that our company is not

1 invested or involved with marijuana, medical or otherwise.
2 We feel, however, that it's important to make some
3 clarifications which are pivotal in making sound decisions
4 in regulatory and legislative matters. Recognizing that
5 marijuana or high-THC cannabis is still illegal at the
6 Federal level and a stigma still exists, we think it's
7 important to point out the similarities and differences
8 between hemp, which is truthfully known as low-THC
9 cannabis, and high-THC cannabis, which is known as
10 marijuana. Those terms are more accurate and throughout
11 the industry are being applied. Marijuana is a term that's
12 really going away. Both are cannabis plants, and that was
13 mentioned earlier. I think it's important for everyone
14 here to understand they're both cannabis sativa plants.
15 One simply has a high THC; one has THC below .3. The
16 remaining molecules are exactly the same in both high and
17 low-THC cannabis.

18 The psychoactive component that is often referred
19 to is THC. CBD is also a very important molecule. Those
20 are the two main molecules discussed, although, as my
21 colleague here pointed out, there are well over 100
22 cannabinoids in these plants, again, the same molecules in
23 both plants. Plants with THC below .3 are considered hemp,
24 and if the THC is above that, it's considered marijuana or
25 high-THC cannabis to be more accurate.

1 Medical marijuana is really just potent cannabis
2 that's grown typically in stringent conditions and
3 typically indoors, and hemp can be grown indoors or
4 outdoors. So, there really is no such thing as medical
5 marijuana. Cannabis either has high or low THC, and its
6 use medically or not medically to be clear.

7 And I make this point because, as a clinician and
8 a scientist, I know that the potential groundbreaking
9 medical advances that can come from the use of these
10 cannabinoid molecules, can be derived from either class of
11 plant, either class of plant. Hemp is not just rope and
12 fiber. Hemp is not just CBD, as the research from Penn
13 State Hershey showed last year.

14 And I'd like to take a moment and refer you to an
15 article that I added to the packet. This is a research
16 paper from Penn State University, where I trained and Dr.
17 Levine also trained. It's a research article that was
18 funded by tax revenue from the cannabis program, the
19 Medical Marijuana Program. It looks at colon cancer and
20 use of what we call cannabinoids in treating colon cancer.
21 For years anecdotally people talked about cannabis being
22 able to have a number of medical effects, which we're
23 talking about, number 23 here in Pennsylvania. Killing
24 cancer cells is one of those. And this paper shows that
25 cannabinoids were effective at reducing the growth of colon

1 cancer cells in a lab. But if you look at this carefully
2 and very few people have -- this paper shows that THC and
3 CBD had no effects on killing the cancer cells whatsoever.
4 There were 10 other molecules known as cannabinoids, minor
5 cannabinoids that were involved in killing these cancer
6 cells. So, what this paper shows is that hemp can kill
7 cancer.

8 And so one of the key things that I want to bring
9 to this Committee's attention is that these molecules have
10 powerful effects, and they are the exact same in hemp and
11 cannabis. They can be grown differently. Hemp can be
12 grown in a greenhouse under the exact same conditions as
13 current medical marijuana growth here in the State. So, I
14 think that's very important. So, here we have hemp killing
15 colon cancer. No one brought that up, but that's the
16 takeaway message. THC and CBD had no effect on those
17 cancer cells.

18 I've been a licensed physician in the State since
19 1991 treating thousands of patients with surgical and
20 nonsurgical care, mostly nonsurgical. I witnessed
21 firsthand the national release of OxyContin, a powerful and
22 addictive long-acting narcotic from Purdue Pharma, a
23 company now disgraced and bankrupt. This, with a
24 simultaneous decision by the Federal Medicare program that
25 patients were not having their pain treated aggressively

1 enough. Programs were put in place that would punish
2 physicians if patients didn't have their pain treated well
3 enough. This became the foundation, this was the
4 foundation of our country's disastrous opioid crisis.

5 Cannabis has been used by civilizations for many
6 centuries, and by this I mean low- and high-THC cannabis,
7 hemp and marijuana. Society has used the hardy plant for
8 food, fiber, and medicine. It was well received and widely
9 used. In the late 1930s the U.S. Government lumped both
10 types of cannabis together in a Federal prohibition that
11 we're all familiar with, and that still exists for high-THC
12 cannabis today. Let's remember all those programs, 33
13 right now in the country that have established Medical
14 Marijuana Programs, they're federally illegal. That's a
15 fact. I'm just giving that as a fact.

16 Thirty-three States have established these
17 programs following California's lead in 1996, defying
18 Federal statute. The Federal Government has overlooked
19 these programs now with 11 States actually approving adult
20 recreational use that was mentioned earlier. U.S.
21 cannabinoid research on cannabinoid medicine lags seriously
22 behind countries like Israel. And this was mentioned
23 earlier. Dr. Raphael Mechoulam is a pioneer in this space
24 and really was one of the first people to study the
25 endocannabinoid system, which is the set of receptors in

1 our body that are actually designed for these cannabinoid
2 molecules.

3 I believe that our country will rapidly catch up
4 and surpass the rest of the world in medical cannabis
5 research. Most States like PA commit a portion of their
6 tax revenue for clinical research programs, much like where
7 this article came from talking about cannabinoids killing
8 colon cancer cells.

9 The Pennsylvania Medical Marijuana Program is
10 just a few years old. It's robust and growing with nearly
11 2,000 active patients, as Dr. Levine shared earlier. This
12 well-run program has allowed these patients to utilize the
13 plant after their condition is certified by a qualifying
14 physician. There's no prescribing of medical marijuana. I
15 have added that service to my practice over a year ago. I
16 found it to be extremely gratifying and educational as few
17 clinicians in this country, let alone in Pennsylvania,
18 truly see these results at the frontline as our company and
19 our team does.

20 Farmacy Advisors, the medical group that I
21 formed, plan to obtain a Federal clinical research permit
22 to complete further studies as an independent, privately
23 owned organization. There is much needed data on low- and
24 high-THC cannabis treatments, once again, remember, colon
25 cancer being killed with no THC. I think it's an important

1 thing to understand as a possibility and opportunity.
2 We're also exploring academic affiliation within
3 Pennsylvania. As I mentioned, though, we are currently a
4 private entity.

5 I have the unique vantage point of years of
6 experience as a physician now involved in hemp and its
7 resurgence made possible by the Farm Bill. I've been
8 actively involved at the Department of Agriculture's Hemp
9 Steering Committee working with the team advancing the
10 cause for hemp. I also have a unique respect for our
11 farming heritage in Pennsylvania and see the difficulties
12 that American agriculture has encountered.

13 With farm incomes continuing to decrease, many
14 see industrial hemp as a potential industry from an old
15 crop. There is tremendous enthusiasm in this country and
16 others about the positive attributes of this plant and its
17 possibilities. 2019, however, saw some expected whipsaw
18 effects in the market as some stakeholders took aggressive
19 positions that were hit with market volatility. We remain
20 a very stable company with diverse capabilities and are
21 very bullish about the future of hemp in Pennsylvania and
22 beyond.

23 Today, I would like to offer a few suggestions
24 based on the observations that we have made. This first
25 year, again, in Pennsylvania was somewhat rocky.

1 Processing was a challenge. There were many farmers that
2 weren't able to find a place to process or purchase their
3 hemp. The seed fiber markets will take many years to build
4 out. There's tremendous reason to be enthused about use of
5 the stalk from the hemp plant, the cannabis plant, but
6 developing those markets and processing centers will take
7 tremendous capital and commitment. And we have made a
8 commitment to that as part of our plan.

9 Few people understand that hemp is actually low-
10 THC cannabis, and I think there's a lot of comments made
11 today that I would have to disagree with, and there's a lot
12 of confusion. But I think you all need to understand that
13 hemp is a cannabis plant and has the same powerful
14 molecules with just less THC.

15 I would recommend not defining hemp in
16 Pennsylvania as only seed fiber or straw, as this will
17 destroy any hopes of significant economic impact to
18 Pennsylvania agriculture. There is minimal margin in
19 processing hemp or straw without the balance of using the
20 seed and the cannabinoid from the hemp plant.

21 I also suggest allowing cannabinoids from hemp
22 grown in an appropriate environment with appropriate
23 testing to be integrated into the Department of Health
24 medical cannabis program. This concept would allow raw
25 ingredients and/or formulated products into the system. As

1 stated earlier, research into cannabinoids is producing
2 tremendous hope for many health issues, and we need to
3 expand into this area.

4 I would ask that you allow access to high CBD for
5 the general public for health wellness and consider
6 Pennsylvania's specific regulations for hemp cannabinoids
7 at appropriate levels. And I'd like to offer myself and
8 our team as a resource for your Committee, the Departments
9 of Health and Agriculture in farming, research, and
10 medicine to make Pennsylvania a shining example of
11 commonsense, progressive leadership and legislation to lead
12 the country.

13 I'm glad to answer any questions, and again, I
14 appreciate the opportunity to speak with you today.

15 MAJORITY CHAIRWOMAN RAPP: Thank you, Doctor,
16 very informative, gentlemen. We really appreciate your
17 presentations today and your written testimony.

18 Our first Representative with a question is
19 Representative Jerry Knowles.

20 REPRESENTATIVE KNOWLES: [inaudible].

21 MAJORITY CHAIRWOMAN RAPP: You are? Okay.
22 Representative DeLissio.

23 REPRESENTATIVE DELISSIO: Thank you, Madam Chair.
24 Dr. Groff, I think it was your last three sentences that
25 helped clarify for me the rest of what you were saying. I

1 was struggling a little bit as to where the cannabinoids
2 fit in in this whole discussion, so they're from hemp only?

3 DR. GROFF: No, and I think that's an important
4 distinction. These cannabinoids are plant molecules. THC
5 and CBD are two of the most well-known of those. Think of
6 salt and pepper and an entire spice rack. Salt and pepper
7 are the two spices everyone knows about, but there's 100
8 other spices that are very important.

9 And as the gentleman next to me mentioned the
10 entourage effect, right now, the medical conditions that we
11 are treating in Pennsylvania with so-called medical
12 cannabis -- and, again, I am a proponent of this --

13 REPRESENTATIVE DELISSIO: I got that part of
14 your --

15 DR. GROFF: -- but it's a shotgun approach. We
16 don't understand how these are working together yet. And
17 so, just to be clear, the entourage effect is really saying
18 they all work together and we're not quite sure how. So, I
19 think it's just important to understand, the human body,
20 whether those cannabinoids come from hemp or from high-THC
21 cannabis, they're the same molecules and the same effects.

22 REPRESENTATIVE DELISSIO: So, do citizens have
23 access currently to cannabinoids?

24 DR. GROFF: Yes, they do, and --

25 REPRESENTATIVE DELISSIO: Because they're the

1 same molecule as the THC that is in the high-THC plants?

2 DR. GROFF: And, to be factual, the hemp plant
3 and all the cannabinoids from the hemp plant are legal at
4 the Federal level. They are the only cannabinoids that are
5 federally legal because the Federal Government decided to
6 make it this way. THC from a hemp plant is legal both
7 federally. It needs to be .3 percent or less. Again, I'm
8 just relaying the facts. This is not my opinion; it's just
9 that that's true.

10 REPRESENTATIVE DELISSIO: So, you come out of the
11 traditional medical community. You're an M.D. or D.O.?

12 DR. GROFF: I'm a medical doctor --

13 REPRESENTATIVE DELISSIO: You're an M.D.

14 DR. GROFF: -- and I've been in practice here
15 since 1991 --

16 REPRESENTATIVE DELISSIO: Okay. So --

17 DR. GROFF: -- yes.

18 REPRESENTATIVE DELISSIO: -- do you know, what
19 you've presented today, is that being more looked at by
20 some of your colleagues in traditional medicine or they're
21 not sure what it is yet or --

22 DR. GROFF: We're talking about the same
23 molecules and the same processes. And I think there's a
24 lot of confusion between sectors trying -- again, those
25 molecules from hemp and marijuana are the same thing.

1 Hemp, if it's going to be used in a medical situation, it
2 needs to be very carefully grown and very carefully tested.
3 And I think, again, hearing some of the comments earlier,
4 our laboratory is going to be able to do full-on antifungal
5 testing, testing of heavy metals. The testing we will be
6 doing on our cannabinoid products from hemp will be as
7 stringent or more stringent than the current Pennsylvania
8 Medical Marijuana Program.

9 REPRESENTATIVE DELISSIO: So, do you anticipate
10 applying for that --

11 DR. GROFF: No.

12 REPRESENTATIVE DELISSIO: -- remaining -- oh.

13 DR. GROFF: No, not at this point. Not at this
14 point. And --

15 REPRESENTATIVE DELISSIO: I was just curious.

16 DR. GROFF: So, I want to just make it clear. We
17 are invested in the hemp business, but I want to look at
18 this from an academic standpoint and look at it for what it
19 is across the board, that these molecules can come from
20 both plants. And we have a tremendous opportunity here in
21 Pennsylvania to set a leadership example by having these
22 two work together at the highest level like some other
23 States are doing and where farmers can benefit and patients
24 can benefit and we can do collective research.

25 We are going into clinical research, and I think

1 that we would love to be working with the Department of
2 Health and raising the bar for citizens of the State.
3 Killing cancer cells, this is not the stoner play of years
4 ago. This is about real science and real healing. And,
5 again, myself and colleagues have treated hundreds of
6 patients in the last year and specifically with
7 cannabinoids and providing consultation and collecting
8 data. Part of the reason we started doing that is because
9 it's not being done otherwise in the State, and we saw
10 that.

11 And so, again, I'm representing hemp, but I'm
12 here representing myself as a physician, as a scientist,
13 and someone who wants to see both these industries grow
14 appropriately in the State.

15 REPRESENTATIVE DELISSIO: I appreciate that. One
16 quick question for the other, Mr. Woolf. When you talked
17 about the hemp-derived CBD as -- and I took from it that
18 it's unregulated and therefore somewhat an inferior product
19 or it seems to be, is that for a topical as well as an
20 oral?

21 MR. WOOLF: It can be for all applications.

22 REPRESENTATIVE DELISSIO: All applications.
23 Thank you, Madam Chair.

24 MR. WOOLF: These are traditionally the CBD
25 products sold commercially in retail establishments.

1 DR. GROFF: Just one more point --

2 MAJORITY CHAIRWOMAN RAPP: Thank you.

3 DR. GROFF: -- I'm not here to defend the sale of
4 a CBD product in a convenience store. And I think that
5 there is a difference. And hopefully you'll understand
6 what I'm trying to point out here. We're doing science.
7 We're doing pharma-grade quality work, so that's a key
8 thing. There's a difference, and we want to differentiate
9 ourselves from that clearly. As hemp people, we're not
10 advocating sale of CBD in a little plastic container over-
11 the-counter at a C store. That's not the way it should be
12 done, and we agree with that.

13 MAJORITY CHAIRWOMAN RAPP: Thank you. Thank you,
14 Representative.

15 I do have a question just looking over briefly
16 with the article from February of 2019, which is pretty
17 recent, and the National Institute of Health supported
18 that, and of course NIH is in the news, you know, quite a
19 bit lately.

20 DR. GROFF: Sure.

21 MAJORITY CHAIRWOMAN RAPP: Yes. Yes, sir. And
22 for the Members, that is at the very back of the testimony.
23 So, is there ongoing research after this research project?
24 Is Penn State continuing their research? And is the
25 National Institute of Health, the CDC, anybody else, is

1 there other grant money going into more research in
2 Pennsylvania in regards to the CBD?

3 DR. GROFF: I can't comment officially. I'm sure
4 there are. And then certainly the program that Dr. Levine
5 was talking about, the C.R., the clinical registrant
6 programs, they're being developed with some of the eight
7 medical schools in Pennsylvania. But there are certainly
8 other groups and other institutions around the world
9 studying this. And this is not just a Pennsylvania or the
10 United States. This is a global phenomenon both medical
11 cannabis, again, high- and low-THC cannabis. That's really
12 the way to talk about it. Using the word marijuana has
13 really just kind of become passé. It's not accurate.
14 High- and low-THC cannabis is really the accurate way to
15 talk about these products.

16 MAJORITY CHAIRWOMAN RAPP: And I did note that
17 the medical marijuana, a lot of the research was done in
18 Israel, and they seem to be a real leader in --

19 DR. GROFF: Yes.

20 MAJORITY CHAIRWOMAN RAPP: -- everything, in
21 medicine and technology. So, thank you very much.

22 And we have a question from Representative Daley.

23 REPRESENTATIVE DALEY: Thank you, Madam Chair.

24 Dr. Groff, my question I guess is directed to
25 you. And I'm thinking that you provided information that's

1 really very different because I went back to Dr. Levine's
2 testimony where she said since hemp-derived CBD products
3 are unregulated in the production and processing to market,
4 you're talking about a different kind of endeavor that you
5 are making on your farm than the typical CBD or the typical
6 hemp production? I mean, that's kind of what I'm hearing
7 is that you don't want to be classified as one of these
8 hemp producers with CBD products that are not regulated but
9 that you are doing a lot of testing, you are holding
10 ourselves to a very high standard.

11 So, I'm having trouble just like -- it was very
12 interesting listening to it because having been on that
13 Medical Marijuana Working Group, I mean -- and I heard
14 people say that medical marijuana is not really actually an
15 accurate term, but you're the first person that I've heard
16 talk about it as low- and high-THC products. So --

17 DR. GROFF: I think I can make it very clear for
18 you. If I --

19 REPRESENTATIVE DALEY: I just -- yes.

20 DR. GROFF: -- had a greenhouse, if I took a
21 greenhouse and I grew hemp cannabis, low-THC cannabis in
22 that greenhouse under stringent conditions exactly like the
23 current medical marijuana, Pennsylvania medical marijuana
24 rules, the cannabinoids could be isolated exactly the same,
25 in a safe fashion, with the exact same quality. And I

1 think that's the confusion. Again, people are associating
2 the product at a C store and there's no question that the
3 Federal Government has not -- the USDA has not brought down
4 regulation. That's part of Fred Strathmeyer's challenge is
5 they're working within a framework. However, just remember
6 that the entire Medical Marijuana Program is illegal at the
7 Federal level. And it's just an important -- and, again, I
8 use it --

9 REPRESENTATIVE DALEY: I know.

10 DR. GROFF: -- and I'm part of it, supporting it,
11 so I'm here as a hemp investor, but clearly I'm looking at
12 it across the board from a scientist. And that's where I
13 want you and other --

14 REPRESENTATIVE DALEY: And that's what I heard --

15 DR. GROFF: -- legislators to understand.

16 REPRESENTATIVE DALEY: -- from you today, but I
17 think that what you were saying is so different at least to
18 me. And we spent a whole summer coming here every single
19 Wednesday. Jim Cox was -- we all sat in the room and
20 talked about this. And it was new information at that
21 point. But what you're bringing forward today seems even a
22 step further into something else to think about. And so I
23 really appreciate it from that point of view, but I know
24 that we constructed the law which became, you know, the
25 medical marijuana law very, very carefully. And hemp was

1 not really part of the discussion at that point. And we
2 were using the term medical marijuana. You're saying
3 that's not actually a good term. So, I feel like we have
4 to continue to learn about this because I think you just --

5 DR. GROFF: I agree.

6 REPRESENTATIVE DALEY: -- presented information
7 that is like -- it's new, it's different, it's a whole
8 different way of thinking about even the way we are doing
9 what we are doing now with our Medical Marijuana Program.

10 DR. GROFF: Understood.

11 REPRESENTATIVE DALEY: And we have to use those
12 terms because those are the terms we have.

13 DR. GROFF: They're not going to go away. The
14 academic terms in academic circles, it's more accurate --
15 again, the marijuana really relates to a sort of negative
16 racial connotation. So, in academia that's really gone
17 away. That's why I share that. It's not going to go away
18 from the public quickly, but it's a more --

19 REPRESENTATIVE DALEY: So --

20 DR. GROFF: -- accurate term, and I just wanted
21 you all to understand.

22 REPRESENTATIVE DALEY: So, I guess the other
23 question is if NIH was supporting this work that was done
24 with the colon cancer, was that done as hemp research?

25 DR. GROFF: No. And I think, to be clear, the

1 Pennsylvania marijuana program participated in this as
2 well, so this was funded by in part -- there's another page
3 from this, that this was funded as a medical marijuana
4 project. And I just wanted to point out that in fact they
5 were the minor cannabinoids that were killing the cancer
6 with no THC effect. That's the only differentiator between
7 hemp and marijuana. So, I just want you all to understand
8 that. So --

9 REPRESENTATIVE DALEY: I appreciate it, but it's
10 kind of like a complete reversal of in some ways some of
11 the things we had talked about. And I just think it's
12 important --

13 DR. GROFF: I think --

14 REPRESENTATIVE DALEY: -- to keep looking at it.

15 DR. GROFF: -- what I'm sharing is factual, and
16 it is different, but it's factual. And keep in mind there
17 are stakeholders that have some sway in how things are
18 presented, and I think that's an important thing. And,
19 again, I'm a stakeholder in hemp, but I'm sharing that the
20 reality is what I've shared is factual, albeit maybe
21 different than what you've heard or what was shared. I'd
22 just like to elevate the game in Pennsylvania where we can
23 work across the board to make this better for everybody in
24 health --

25 REPRESENTATIVE DALEY: I agree. And one of the

1 things I learned during that, you know, back in 2016 was
2 that part of the reason that doctors, you know, didn't talk
3 about marijuana as a treatment was because it was illegal,
4 and they could not do that, so they weren't given --

5 DR. GROFF: It's still illegal.

6 REPRESENTATIVE DALEY: Well, exactly. It's
7 still --

8 DR. GROFF: And that's --

9 REPRESENTATIVE DALEY: -- illegal, but --

10 DR. GROFF: The point is we don't prescribe it
11 because we'd lose our DEA license.

12 REPRESENTATIVE DALEY: My point is that he said
13 they didn't even teach us anything about it in medical
14 school. We don't know anything about it.

15 DR. GROFF: That's correct.

16 REPRESENTATIVE DALEY: And I thought that was
17 like a really honest comment coming from a physician, an
18 M.D. who was down at University of Penn and was practicing
19 palliative medicine. And I will never forget him saying
20 that because you don't often hear doctors say they don't
21 know about something.

22 DR. GROFF: No, that's a great point. And I was
23 at University of Virginia from '87 to '91. In our
24 pharmacology class we had five minutes on cannabis, and the
25 only thing that was taught was there's no lethal dose.

1 That's it. And it's true. And that's an important fact.
2 There's no lethal dose of marijuana. But now the
3 endocannabinoid system really developed and understood by
4 Dr. Mechoulam from Israel, that was just 15, 20 years ago.
5 So, those of us who have trained and were in med school
6 years ago, there's no question there's a lot of new
7 knowledge and new research that needs to be --

8 REPRESENTATIVE DALEY: Well, I'm kind of hoping
9 that somehow the Health Committee can continue to discuss
10 this because I think there's just so many things that we
11 don't know. And we can't really do good legislation when
12 there are so many gaps in our knowledge.

13 DR. GROFF: Glad to help.

14 REPRESENTATIVE DALEY: Thank you.

15 DR. GROFF: Be glad to help.

16 MAJORITY CHAIRWOMAN RAPP: Thank you,
17 Representative.

18 Representative Keefer.

19 REPRESENTATIVE KEEFER: Dr. Groff, I just have a
20 quick question. I've read this a couple of different
21 places, and it was one of the comments here is that hemp is
22 a bioaccumulator, essentially it will suck whatever's out
23 of the soil and its surroundings. Is that true also for
24 the marijuana plant?

25 DR. GROFF: That's true for any cannabis plant.

1 REPRESENTATIVE KEEFER: Any other cannabis plant?

2 DR. GROFF: Correct. Correct.

3 REPRESENTATIVE KEEFER: So, it's not different?

4 DR. GROFF: Correct.

5 REPRESENTATIVE KEEFER: Okay. Just making
6 sure --

7 DR. GROFF: And to --

8 REPRESENTATIVE KEEFER: -- that that is the case.

9 DR. GROFF: Yes.

10 REPRESENTATIVE KEEFER: Okay.

11 DR. GROFF: And that's one of the reasons we test
12 for heavy metals in all our product and another reason why
13 we made a commitment to an 80-acre organic -- certified
14 USDA organic hemp farm in Gettysburg, so we will be
15 utilizing certified USDA organic hemp, of which there's
16 very little in the country, but we have exclusive access to
17 that for our system. So, those are very important tests
18 that need to be done for sure, and they're also done,
19 pesticides. They're also done in the medical cannabis
20 program as well.

21 REPRESENTATIVE KEEFER: Okay. Thank you.

22 MAJORITY CHAIRWOMAN RAPP: Thank you,
23 Representative.

24 Representative Cox.

25 REPRESENTATIVE COX: Thank you, Madam Chair. My

1 first question is for the gentleman nearest me. Looking at
2 the page, it says six new sites opening in 2020. The
3 brick-and-mortar experience, do you have any brick-and-
4 mortar facilities right now?

5 DR. GROFF: Yes, we do. We have one in York,
6 Pennsylvania.

7 REPRESENTATIVE COX: Okay. I thought you had
8 said that in your testimony.

9 DR. GROFF: That's correct.

10 REPRESENTATIVE COX: And so you've treated over
11 100? Is that the initial --

12 DR. GROFF: In my career I've treated tens of
13 thousands of folks. In the last year --

14 REPRESENTATIVE COX: Right. And so you didn't --

15 DR. GROFF: Over the last year I've been
16 counseling folks and providing certifications for the
17 medical cannabis program, which does not involve a
18 prescription.

19 REPRESENTATIVE COX: Right.

20 DR. GROFF: And so we've had ability to observe
21 directly results from both high- and low-THC products. We
22 do not participate in any high-THC product sales. It's
23 illegal both in the State, for us in the State and
24 federally. But we've seen tremendous results from a number
25 of conditions, many of which are part of the Pennsylvania

1 program, the 23 that are noted for the high-THC program.

2 So, yes.

3 REPRESENTATIVE COX: Okay. And so I guess what
4 I'm digging at is what do you anticipate the ideal patient
5 experience when your sites open? You know, they walk
6 through the doors of Farmacy partners, what is that
7 experience ideally? Or is it something where you're hoping
8 that, you know, family doctors and so forth around the
9 State will point people to your direction? What is your
10 ideal model of patients coming to you, and what should
11 their experience be if everything goes the way you hope?

12 DR. GROFF: Well, experience certainly would be a
13 pleasant, comfortable experience that's approachable,
14 accessible where they're not filled with fear or worried
15 about stigma. So, I think we've achieved that in our first
16 location. There was a slight picture of kind of the feel
17 of our other facilities not unlike the medical dispensaries
18 that exist, the medical high-THC facilities that exist in
19 the State currently, comfortable feeling and educated and
20 pleasant folks to interact and provide education. The
21 folks that are working in the high-THC facilities are
22 knowledgeable to the extent they can be, and our folks are
23 educated to that level, at least similarly.

24 REPRESENTATIVE COX: Okay. And so would a
25 patient walk in and speak with someone and say I'm having,

1 you know, joint pain in my elbow. Is there something that
2 you would recommend? Is it at that level or is it more of
3 a schedule-an-appointment kind of thing? What is that
4 experience?

5 DR. GROFF: So, both opportunities exist.
6 Currently, I see patients at the York location in a part-
7 time basis, and we also have a retail component, maybe like
8 a Starbucks where someone could walk in, talk to someone,
9 and grab a high-quality product. Currently, these
10 products, as you know, are legal by the Federal Government
11 through the Farm Bill. And rather than folks buying stuff
12 online where they have no idea where it's coming from, we
13 assure supply chains that are controlled in a seed-to-shelf
14 fashion. As I mentioned, we're using from a go-forward
15 basis certified organic hemp, something that's very unique.
16 So, we're very attuned to supply chain, very similar to the
17 current system on the high-THC side --

18 REPRESENTATIVE COX: Okay.

19 DR. GROFF: -- controlling supply chain from seed
20 to shelf --

21 REPRESENTATIVE COX: Thank you.

22 DR. GROFF: -- very important.

23 REPRESENTATIVE COX: My last question is for both
24 of you. If you could nudge us in one direction or another
25 -- and I very much would be comfortable with both of you

1 saying, you know, leave it as it is and let's see what
2 happens -- but if there is legislation, if there's
3 statutory authority that's needed or statutory restrictions
4 that are needed, what would you advise us to take a look at
5 first? Representative Daley pointed out, you know, this is
6 an area we don't want to just charge right into, but if
7 we're going to narrow our focus and say how do we best
8 protect Pennsylvania's patients and consumers, and how do
9 we make sure that the best product is getting to them, how
10 on the State level would you advise us to take that next
11 first step if you will?

12 MR. WOOLF: Great question. Again, while Dr.
13 Groff's approach raises the bar on the use of hemp-based
14 cannabinoids for health purposes, there exists in my
15 opinion a public safety issue already with the existence of
16 hemp-based and hemp-derived products that have flooded our
17 market from the Farm Bill, right? There is a need for
18 testing of those products as soon as possible. Our public
19 is at risk from those.

20 DR. GROFF: I think there needs to be more
21 dialogue. I hope I've provided some insight into some of
22 the confusion that exists, some of the terminology that's
23 somewhat inaccurate, and hopefully shared with the
24 Committee that not all hemp operations are as dire as maybe
25 what were represented here earlier. And I think that's one

1 of the biggest concerns I have in hearing how these -- hemp
2 was described by some of the other witnesses, I think it's
3 a concern. So, again, part of my goal here was to share
4 the story of a company like ours that's doing cannabinoid
5 research and growth at a pharma level, and there are others
6 in the country but certainly there are others that are not
7 doing it that way. So, clearly, we have to understand
8 where these ingredients are coming from, and there needs to
9 be some regulation.

10 As Dr. Levine said, I'm not the attorney. I
11 don't want to weigh into all those things, but there needs
12 to be more dialogue. And I think the opportunity here for
13 Pennsylvania to do an amazing thing by recognizing these
14 two can work together at the highest level, we could
15 literally set the standard in the country.

16 And one quick comment. We're here talking about
17 CBD. Hemp is an amazing plant on the non-cannabinoid side,
18 and there are tremendous opportunities in our State to lead
19 the industrial side of hemp. And I don't want to take a
20 lot of time there, but there's an incredible opportunity to
21 develop these industrial uses. And we've been involved in
22 some of them, but they are going to take tremendous capital
23 and probably a public-private partnership to really get
24 them off the ground. But I know the Department of
25 Agriculture is very interested. It would be a shame to let

1 this hemp industry really wither away because hemp farmers
2 couldn't benefit from the higher value cannabinoid -- the
3 value from straw, seed, and fiber is minimal -- not zero
4 but minimal compared to the other side.

5 So, this industry will disappear, the hemp
6 industry will disappear in Pennsylvania in a year or two if
7 these cannabinoids aren't -- if we don't come up with a way
8 where they can work together. And they should because it
9 makes sense from science and academia. But there's
10 certainly a lot of pull, and there's stakeholders, but I
11 think it would behoove us all to find a way to work
12 together at the highest level without compromising patient
13 risk.

14 REPRESENTATIVE COX: Thank you.

15 MAJORITY CHAIRWOMAN RAPP: Representative Gaydos.

16 REPRESENTATIVE GAYDOS: Thank you, Chairwoman.

17 So, if I understand it, you're using hemp for
18 your medicine, is that correct?

19 DR. GROFF: Yes, we're in a transition of using
20 outsourced product, and literally as we speak our lab is
21 finishing up, and we'll be using this USDA organic-
22 certified product in our existing products within several
23 weeks, so --

24 REPRESENTATIVE GAYDOS: But I thought I
25 understood that according to the Department of Agriculture

1 that it cannot be used for, I guess, food product, which is
2 I would assume an ingestible. Are you doing ingestibles or
3 topical?

4 DR. GROFF: So, let's be clear. The Federal
5 Government has right now said that hemp products -- CBD is
6 not federally approved to be used in food and beverage.
7 And what the government is currently doing is going after
8 false claims. So, false claims are when you say that this
9 product could cure your cancer or your seizures.

10 Now, again, just for perspective, keep in mind
11 the 23 conditions that the State is currently advocating
12 for the use of marijuana is a false claim. There's not
13 enough science. So, I just want everyone to understand
14 that. Again, I'm seeing patients being treated, so I'm a
15 fan of both, but understand just the legality of those
16 things.

17 So, the incoming FDA Commissioner has said this
18 week that they know they need to find a way to allow CBD to
19 have safe access because the public wants that. And these
20 are comments literally from him this week. So, the FDA is
21 going after false claims more than anything on the CBD
22 side. And, of course, the Federal Government is completely
23 ignoring the 33 States that are making false claims to the
24 Medical Marijuana Program. So, again, just an important
25 perspective.

1 REPRESENTATIVE GAYDOS: But in Pennsylvania
2 that's not permitted, is that correct?

3 DR. GROFF: The definition in the Pennsylvania
4 Department of Ag is THC less than .3 --

5 REPRESENTATIVE GAYDOS: Okay. Okay.

6 DR. GROFF: So --

7 REPRESENTATIVE GAYDOS: Thank you. Thank you for
8 that clarification.

9 DR. GROFF: From hemp products.

10 MAJORITY CHAIRWOMAN RAPP: Are there any other
11 questions or comments?

12 Gentlemen, we truly appreciate your testimony,
13 your knowledge of this subject. You have far more
14 knowledge than we do on this matter. So, if we were to
15 move forward on anything, we certainly hope that you would
16 be there for us to consult with in the near future if we
17 are looking at any type of legislation or regulation. At
18 this point we have not really discussed that. And I said
19 that at the very beginning. This was an informational
20 hearing, and we did receive a lot of valuable information
21 today, and for that I thank all of the panel members here
22 today. And certainly, this is a subject that we need to be
23 looking at, observing for the benefit of the people of
24 Pennsylvania.

25 Thank you for being here today. Thank you,

1 Members. And we do have another hearing next week with the
2 Subcommittee, and we will be sharing more information about
3 that later. But thank you, gentlemen, for being here.
4 Thank you. Thank you, Secretary Strathmeyer. I think
5 you're still here. Oh, you are.

6

7

(The hearing concluded at 1:03 p.m.)

1 I hereby certify that the foregoing proceedings
2 are a true and accurate transcription produced from audio
3 on the said proceedings and that this is a correct
4 transcript of the same.

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