BEFORE THE NEW YORK STATE SENATE

ROUNDTABLE DISCUSSION ON

THE COMPASSIONATE CARE ACT

Albany, New York

March 12, 2014, at 10:00 a.m.

PRESIDING:

Senator Diane J. Savino

PRESENT:

Senator David Carlucci

Senator Mark Grisanti

Senator Ruth Hassell-Thompson

Senator Brad Hoylman

Senator George D. Maziarz

Senator Joseph Robach

Senator Malcolm A. Smith

Senator David Valesky

Assemblyman Matthew Titone

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SENATOR SAVINO: So, good morning, everyone.

I'm State Senator Diane Savino, and I am the main sponsor of the Compassionate Care Act of the New York State Senate.

I am joined here by my colleague in the Senate Majority Coalition and the Independent Democratic Conference, Senator David Carlucci from Rockland County.

We will be joined, on and off, during our period, by members coming from all over the Senate, and, potentially, some members from the Assembly are going to pop in, as we commence this roundtable on the Compassionate Care Act in the Senate.

First, I want to say to everyone, thank you for your support for this piece of legislation.

You are predominantly responsible for the movement in the Senate that has occurred in the past six months, and you should give yourselves a round of applause for that.

[Applause.]

SENATOR SAVINO: A year ago, people said that this bill was dead on arrival in the Senate.

We knew better, and, we worked very aggressively to begin to change people's minds.

And what we're doing today is trying to

change the last few minds that are out there.

Fifteen minutes ago, Senator Joe Addabbo from Queens popped his head in; I introduced him. He announced that he is now a new "yes" vote.

So we are building members. We have way more votes than we need to pass the bill right now.

Now it's about getting it through the legislative process, and trying to snag a few more members on the way.

So, we're going to start today with our first speaker, Cindy Gold Tangney, who's a parent advocate.

Her granddaughter is, right now, in Colorado, and Cindy is going to tell her story.

Come on down, Cindy.

[Applause.]

CINDY GOLD TANGNEY: Good morning.

SENATOR SAVINO: Good morning.

CINDY GOLD TANGNEY: I love seeing all the kids here today.

And, I just want to let you know that I don't have my granddaughter here today, but she is on the -- in on the cover of several newspapers, and she's in Colorado right now receiving treatment of medical marijuana.

So what I want to do this morning is tell you why I became an advocate for medical marijuana.

My granddaughter Mabel Grace was born in May, and at 5 weeks old she started having seizures.

She was admitted to Columbian Presbyterian Medical Center in New York and spent three weeks there.

Imagine having a baby having more than 20 seizures a day and not knowing what's going on. And the doctors were quick to offer drugs like phenobarbital and TOPAMAX and Depakote.

During the three weeks, Mabel had many tests, scans, EEGs, blood work, to determine what her problem was.

We never found that out after three weeks, so we came home with the baby, still with seizures.

And after a few months went by, she was then diagnosed with infantile spasms, and the only thing the doctors had to offer us at that time was more drugs.

The side effects of the drugs on a 5-month-old baby is amazing. They don't prescribe these drugs to children under 4 years old.

So we came home.

She was diagnosed with the infantile spasms,

and they added another drug, and this time they added a drug called "SABRIL."

SABRIL, you can become blind from SABRIL; so that's one of the side effects of SABRIl.

So over the course of time, Mabel tried and failed five drugs.

In August, we watched the documentary "Weeds," by Sanjay Gupta, and my daughter and I looked at each other, along with my son-in-law, and we knew that we had to try that. Maybe that would be the answer for Mabel. The drugs were not helping her.

In September, she was diagnosed, after some genetics tests, with a very rare genetics disorder called "CDKL5," and CDKL5 presents itself with early onset of seizures.

We knew we had something to do. We knew did not have a lot of time, and we went -- we drove to Vermont, and we met Paige Figi and Joel Stanley, and they gave us hope. And they said, in Colorado, Charlotte Figi was using something called "Charlotte's Web." And we heard about it in the documentary by Sanjay Gupta.

We then drove out to Mineola, and we testified there in front of Assemblyman Gottfried.

And, soon after then, we realized that Colorado was the only answer, that the state that we lived in, that I raised my children in, my daughter lived in, was not going to give her what she needed; at least the opportunity to try.

We don't know if that's the answer, but how do we know if we don't try.

So she left her -- she's gone now for 58 days.

I call Governor Cuomo daily and remind him that she's gone another day.

She left her support system, her husband who needs to be home in New York State to work, to support them in Colorado.

So I'm here asking you to support the Compassionate Care Act, whoever here needs to hear that.

My daughter and granddaughter deserve the right to live in their state and have a medication that's prescribed by their doctor. Not by lawmakers making decisions; by their doctor. Her doctor would prescribe this if she was living in New York State.

I wonder if anyone saw the documentary "Weeds" last night? I know it was late.

SENATOR SAVINO: No.

CINDY GOLD TANGNEY: I called a lot of Senators yesterday and asked them if they would please watch it or tape on it, or somebody watch it, because the information is something that people have to listen to; they need to hear this information.

So in closing, I would like to say:

That if it was any one of your children, what would you do?

You would probably go to the ends of the earth, which is what my daughter is doing, and I'm very, very proud of her. She's living in Colorado by herself.

She's actually in the home of Paige Figi, in the article in "People Magazine," if people haven't seen it.

And, they're going to -- and she's going to try the Charlotte's Web very soon. She was on a waiting list.

As people know, when you get out in Colorado, you can't just automatically try Charlotte's Web.

She went to two doctors that prescribed it. And, hopefully, within the next couple of weeks that will be what she's going to do.

So maybe this won't work, but we are going to

try it.

So I ask that you please support the Compassionate Care Act, and us parents will do anything that we have to do.

I appreciate all your hard work.

Thank you very much.

[Applause.]

SENATOR SAVINO: We've been joined by Senator Dave Valesky, on the end, another member of the Independent Democratic Conference and the Coalition;

And, Senator Mark Grisanti from the Coalition, who was the first Republican to come out publicly and support the Compassionate Care Act.

[Applause.]

SENATOR SAVINO: Our next --

SENATOR GRISANTI: I understand we dragged a few others.

SENATOR SAVINO: Yes, we've dragged a few. And a few more. They'll keep coming.

The next speaker is Susan Rusinko, who suffers from MS.

[Applause.]

SUSAN RUSINKO: Thank you for allowing me to speak today, before I forget that.

My name is Susan Rusinko. I am 52 years old. I'm happily married to Joe for 26 years.

I often joke with him that he got the worse in the "for better, for worse." He always tells me "no."

I do have an extraordinary husband.

I have three sons. Nicholas is 24, and I have identical twins who are 21.

I'd like you to understand my journey a little bit prior to my diagnosis with multiple sclerosis, so you can understand why I -- what I'm doing.

I was born and raised in Auburn, New York, in a large Italian, Catholic family; five boys, five girls. I am number seven, and the favorite.

My parents are 85 years old.

Eight out of ten of us reside in Auburn, New York, to this day, and every Sunday, we still go to my parents house for Sunday dinner.

My sisters are my closest and dearest friends, and we do not generally make a plan unless we've spoken to one another.

My mother and four sisters and I go away shopping Thanksgiving weekend, Friday, Saturday, Sunday; no husbands, no kids.

It's a time that we -- that I cherish, and I've done it since before I was married.

Each of us girls also has a pie to bake at Thanksgiving, and specific Italian cookies and breads for Christmas.

Family really is such an important part of my day-to-day life.

Now, from the time our sons were small, my husband said to them: That you could play any sport you want, except for hockey.

While our oldest son, Nicholas, played a sport for every season from the age of 5, until he graduated high school.

So when Jacob and Noah turned 5, they decided, hey, they'd like to try a few sports, as well.

After they got through Pony League, though, Jacob and Noah decided that sports weren't for them, so they decided to start playing piano, electric and bass guitar, and even drums. And to this day, I have music in my home every day.

We were a very active family. We rode bikes you know, I roller-bladed to Barry White. Life was good.

In February, we took our very first family

vacation -- in February of 2000, we took our first family vacation, to Disney World, six nights and seven fun-filled days. It was fabulous, but I was exhausted.

It is a small world after all, so no sooner had we gotten off the Tea Cups, we got onto a whole nother cup of tea.

When I was diagnosed with multiple sclerosis in 2000, at the age of 38, Nicholas was 10 and in fifth grade, and Jacob and Noah were 7 and in second grade.

I was teaching two water-aerobic classes a day, five days a week, as well as waiting tables two nights a week at a fine-dining restaurant.

I started noticing little things: tingling, numbness. I was dropping things on a pretty regular basis. A butter dish, that first year, just never stood a chance in our house.

My vision became blurry. I had bladder and bowel issues.

Things were going really haywire.

So on Friday, April 14th of 2000, I woke up, and my right leg kept giving out on me like it wasn't even there. It just wouldn't support me.

So my husband's off to work, my sons are off

to school, and little did any of us know it would be four weeks before would I return to that kitchen.

Imagine kissing your mother goodbye and not seeing her in your home for four weeks.

I was at Upstate Medical Center for one week in Syracuse, and then deemed not safe to return home in that condition. So I was sent to St. Camillus Rehab Center in Syracuse for three weeks of intensive therapy.

I was taught how to do any and all household chores from the comforts a wheelchair. I learned to walk with a brace.

I was good to go home.

I finally got to climb the front porch of our -- into our new life.

Now I'm thinking, Great, I can do everything I need to do at home, but, Nicholas is 10, Jacob and Noah are 7; they're boys, through and through.

Am I still going to be able to keep up?

What if I am not able to care for my own children?

As a mother, I wanted to be able to keep up. I wanted to be there for their first catch, hit tackle, touchdown, basket. I wanted to be there when they strapped on their guitars and sat down to

their first piano recital.

When my legs became stiffer and painful, I became more fatigued, my energy was level depleted.

I really thought, there has to be a better way.

I have to be able to cook for my family and bake for my family, I have to try to keep my house clean, and still have enough energy to enjoy my family.

I am a good patient. I do agree with my neurologist most of the time.

However, one symptom starts and you get a medication. And then another symptom starts, so you get another medication to stop that symptom.

So by 2003, now I'm on 17 pills, and at home, on the couch, in a prescribed drug-induced haze.

I wasn't living my life.

I wasn't able to go to any sporting events. I couldn't leave my house.

When you have bladder and bowel issues, you're not leaving your house.

So there my husband goes with my three sons, and I'm still stuck at home.

So, it was time for me to advocate for

myself.

I spoke with my neurologist, and said: I really -- I'm tired of what I deem as the "Elvis plan"; something to wake me you, something to help me sleep. It's not my life.

So he decided -- when I spoke with him, I said to him that I need to be weaned -- I need to get off of this medication, and I am also going to smoke marijuana illegally.

Of course, his very first thing he said to me was: Oh, my gosh, are you going to be able to get it from a safe place?

So, now I also have the added worry about my parents and my family and our children and friends, and what this could do to my family.

How could I explain to my elderly parents, how would my parents explain to their friends at the YMCA, that their daughter's name -- why their daughter's name was in the paper?

But, again, I wanted to live my life. I wanted to be able to be active in my children's life. I wanted to cook dinner, I wanted to bake.

So as our sons got older, I did share with them that I am smoking marijuana.

And of all the times, I was so nervous,

putting all of us in jeopardy.

My boys said to me: Mom, we want you to do whatever is going to help you have a better day and a good life.

I wondered if they were embarrassed that their mother uses marijuana.

They hugged me and said: Mom, you do way more embarrassing stuff than that.

[Laughter.]

SUSAN RUSINKO: I love my sons. I love my parents.

My parents know, as do all nine of my brothers and sisters.

My mother has said to me, she was always amazed at what I was able to do having multiple sclerosis.

And I said to her: You had no idea that I was using marijuana, and that's what was helping me get through.

Because I have used marijuana:

I have been able to walk through historical forts;

I've seen Jackie Kennedy's entire collection;

I've been to the Hockey, Baseball, Football, Hall of Fames;

I've canoed in 12 Great Races in my hometown in Auburn;

I'm still able to bake those pies, and dozens and dozen of cookies.

And I think that, now, April is my 14th anniversary, and I think it's high time somebody figure out that marijuana does actually work.

This disease is unpredictable, and every day is a different day, and it can go from bad to worse in a blink of an eye.

But what helps me, is knowing that so many people want me to do what I have to do to live my life as comfortably as possible.

So it's 14 years in April, and I have watched my sons -- I've watch Nicholas hit home runs and make touchdowns and baskets, and some of the most amazing catches.

I watch Jacob and Jonah play gigs that had the crowd eating out of their hands.

And I stood on the proud -- on the sidelines when Noah was chosen to play the National Anthem at a couple Single-A ballgames in our hometown.

I was there when my sons walked the stage to get their high school diplomas, and I pray that I'm

there when they get to walk the stage for their college diplomas, and for their weddings, and for grandchildren.

So let me tell you: There doesn't need to be anymore research. We've researched it to death.

It needs to get passed.

Without marijuana, I would not be sitting here today, asking, begging, pleading, for this bill to get passed.

I do risk legal ramification every single day, but for me, it's something that I have to do so that I can live my life.

Even if it is not something that each of you choose for yourself, please think of your loved one, and wouldn't you want them to have a good life, and to be able to live their life as comfortably as possible?

I certainly hope that this year, 2014, is the year for the Compassionate Care Act to pass.

I'm 14 years in my disease.

These children don't -- I don't know that they have 14 years, you know?

So for me, yeah, I guess I can still go illegally. They can't.

Please do something for these children.

We need the Compassionate Care Act.

Thank you.

[Applause.]

SENATOR SAVINO: Thank you, Susan.

We have been joined now, also, by Senator Brad Hoylman from Manhattan, and Senator Joe Robach from Rochester.

[Applause.]

SENATOR SAVINO: And I believe up in the audience I see back there, Senator Smith from Queens.

You can come down and sit with us.

[Applause.]

SENATOR SAVINO: Our next speaker is Donna Romano from the city of Syracuse. She also suffers from MS.

[Applause.]

DONNA ROMANO: Don't applaud. I haven't said anything good yet.

[Laughter.]

SENATOR SAVINO: You're here.

DONNA ROMANO: I'm here. It's been a rough morning.

My name is Donna Romano, I'm from Syracuse.

I'm a Navy veteran of the Vietnam Era.

I have a seizure disorder, and, luckily, I also have multiple sclerosis. Sort of like the lottery.

My husband and I have three grown children, and three very, very adorable grandchildren.

I've been a user of medical cannabis for about five years.

Until that time, I was a law-abiding citizen, as was expected of me, because I come from a family of civil servants:

Three of my uncles were Syracuse policemen and investigators;

My two nephews are firefighters: one in Washington, D.C., and one in Virginia;

Another cousin is a firefighter in Syracuse;

And, my ex-brother-in-laws are also in law enforcement.

The course of my MS has not been unusual, except that it produces sensory symptoms at first, and the motor deficit started to come recently.

I've had optic neuritis, blindness, deafness. All those things were helped with IV steroids. Those treatments took a toll on, you know, my bone health, and just lead to a lot of different side effects.

I've had perception and balance issues and one-sided weakness that gets worse now as I, you know, age.

My most troublesome symptom has always been fatigue.

I would get up in the morning feeling like I've been hit by a truck, and sometimes go from my bed to the couch, to the bed again.

When all this nonsense first began, I was home-schooling my three kids.

Doctors prescribed a pill for fatigue, which turned out to be an antidepressant. Apparently, there were several years of my not crying or laughing while on that pill, as my family told me later.

Then came a new pill for fatigue, a controlled substance, which I'm still on once in a while, and it's worked well, but it has the side effect of increasing my blood pressure to high, from border line.

There's just a thing, when you grow older, there's more side effects with a lot of these medications you're on.

Just like with the children, the side effects for them are enormous for these medications that

they're put on.

So, there have been many other pills along the journey. Self-injection, daily, for 10 years.

Just to combat the effects of one pill, I would have to take another, just like Susan had said. We've all heard that story.

So, I've also tried things: physical therapy, water therapy, chiropractic, acupuncture, infrared sauna, special diets, massage, biofeedback.

Received benefits from some. Some should be covered by insurance.

But, still, the doctors, you know, they still want you on the pills, the injections, and everything.

Despite all the pills and all the things I've tried, the symptoms continued to get worse, especially my spinal pain and the spasticity of my legs.

"Spasticity," you'll hear that word when people with MS talk.

What that is, is like a charley horse in your whole leg. And try as you might to stretch it, rub it, you know, it just does not go away. And it feels like your feet are sometimes in concrete blocks, and that's how, you know, you're walking.

You see a lot of people with MS walking very stiffly or widely gaited because of that.

And about that time that my legs started getting really bad, a friend of mine -- I discovered that a friend of mine was smoking medical marijuana for her MS.

And so I decided, well, I'm going to try it, and I really was amazed that I found relief.

I had that inner voice of mine keep saying: Don't break the law. What will -- you know, what will Uncle Andy say?

And, I just had to go with it.

You know, I did come out before my -- I was in the newspaper, an article, in Syracuse, and I had to call my elderly aunts to tell them about my position ahead of time, because it's just that way in my family.

So, anyway, I found relief.

My legs relaxed, they didn't jump around.

I could sleep.

And getting a night's sleep, you know what it is to get a good night's sleep, you can function the next day.

And, so, that caused me to, you know, be there for my family. I'm active in the community.

I'm active in the MS community.

And now that my grandkids are not babies anymore, they're toddlers, I have to be on. You know, I have to be able to do things with them.

So, I realized that my MS flare-ups have decreased significantly in the past five years.

I haven't had to take IV steroids since 2009.

I haven't seen my neurologist for over a year. Our relationship has been very different since the day I told her that I used medical cannabis. She's very uncomfortable with my choice. She doesn't want to discuss it.

And she has, instead of -- when I left her office last, about, maybe it's 16 months, she never said, Okay, make the appointment for six months.

I mean, I've been seeing her for 16 years. And, that difference in her, and her reluctance, leaves me hanging, you know, as to the condition of my MS.

I mean, I'm sort of in a hard place now, you know, where I feel better, and I think my symptoms are abating when I use medication of cannabis. But, I don't have that medical benefit of a provider that I can talk with.

And that's really bothersome to me.

And that's one of the main reasons that I'm here now, to open up that conversation with the providers, and to let them feel -- you know, she feels like she's going to be, I don't know, sanctioned? reprimanded? I'm not sure.

And, so, that's why this Compassionate Care Act also needs to be passed, so that we can have those conversations, and I can have that support by a medical provider again.

SENATOR SAVINO: Are there any -- any of your other physicians, are they supportive of your choice, without sanctioning it?

DONNA ROMANO: My acupuncturist, she's also an anesthesiologist, she's okay with it. You know, she still considers it a drug, which, you know, it is, it's a medication.

But there really -- no, I don't. I don't have -- they all sort of, Oh, we're not going to talk about that. Don't tell me what...

You know?

I do have some of my treatment at the VA hospital, because I have a disability. And, often, they will ask me to urinate in a cup, to see if I'm on anything.

I mean, they would prescribe me for my spine

pain. They would prescribe me oxycodone in a minute, you know?

But, something like this, you know, they're not willing to speak about.

So I just urge the Senators that are dragging their feet, trying to make a decision, to consider this, too: You know, that the doctors need to have the freedom to speak to us, and provide for us in the way that they should.

And I hope that they -- especially Senator DeFrancisco, if you're listening -- would vote yes for Compassionate Care Act, this session.

SENATOR SAVINO: Thank you, Donna.

I think Senator Robach has a question.

SENATOR ROBACH: I really don't have a question.

I thank you, Donna, for sharing your story.

And I've heard Susan's when we had the little roundtable with Senator Maziarz.

And I do think it's important to note that, because I think this is so relevant, that this model of the bill we're trying to promote is a medical one, and under doctor supervision.

And there are many doctors that do adhere to this, and are joining that, and are helping, you

know, move this. And have actually told patients, which is, to me, the tough part.

You made the point so much, that in the vast realm of pharmaceuticals that we already use, while they have some good things, they have some bad side effects.

And many physicians are saying: Let's at least try this for complex cases, whether it's young people with seizures, elderly people with, you know, long-term debilitating diseases.

I think we can do what, you know, 19 other states do, which aren't the ones that are getting all the publicity, and have that on that medical limited scale, to help you.

So, I just wanted to say, it's important to know that all doctors aren't in that category.

DONNA ROMANO: I know.

I went to a program last week, about a new oral medication for MS. And at the end of -- the doctor was from Strong Memorial in Rochester.

SENATOR ROBACH: I've heard about it before.

DONNA ROMANO: Yeah, you have.

And so after his talk, and the patient advocate that was there, speaking about that new oral medication, which is a big deal in the

MS society -- MS group, because most of them have been injectables, until recently, I asked the doctor and the advocate what their position was on medical marijuana.

And the doctor said, that he said: I'm all for it. I think it should be legalized.

He said: I've seen a lot of patients respond very well.

And I really thought to myself, if I lived in Rochester, he would be my neurologist.

SENATOR ROBACH: Yeah, and I think I know who you're speaking of.

So, many physicians have come out, pretty cogent reasons, of, you know, why they support it, too.

But, you know, in today's day and age, we've gone to the model, where -- and we've had great success, by trying to use experiment, spend a lot of money on research, to find out what works.

And I hope we will do it, because we should be responsible and include what's working for you.

DONNA ROMANO: And for the first time, I think I can say that I deserve it.

[Applause.]

SENATOR SAVINO: Thank you, Donna.

This is a bicameral roundtable. We have a member of the Assembly, Matthew Titone, is here on the dais.

And up in the back, sitting back there, is Assemblyman Mike Cusick; and I mention for a reason, not just because he's from Staten Island.

But, Mike Cusick is the sponsor of the I-STOP bill in the New York State Assembly, along with Senator Andrew Lanza, who will probably be here later, dealing with the prescription-drug problem that we now have.

Many of you know that your doctors are prescribing highly addictive, dangerous drugs; that's your only choice. And that has spiraled out of control, creating another problem in New York State.

So we need I-STOP, and we Compassionate Care.

We're going to shift gears a bit now, to go to industry professionals from other states.

One of the many questions we get about this bill is: It's no longer if; it's when. And when it does happen, what could it look like, what would it look like, what should it look like?

So we're going to have, now, a speaker from Gaia, which is a medical-marijuana producer in

Colorado.

I had the privilege of going to visit them about a year and a half ago, to see what a medical-marijuana facility could look like, what a dispensary could operate like.

And, Meg Sanders, who is the CEO of Gaia Plant-Based Medicine, is going to come down and address us now.

[Applause.]

SENATOR SAVINO: Welcome, Meg.

MEG SANDERS: Thank you.

SENATOR SAVINO: Nice to see you again, and, Charlie. Charlie's going to -- well --

MEG SANDERS: Yes, Charles is joining us.

Good morning, Senator Savino, members, and ladies and gentlemen of the audience.

My name is --

SENATOR SAVINO: Meg, pull the mic a little bit to you.

MEG SANDERS: Oh, sure.

SENATOR ROBACH: You can tip that up, too, if you want to.

SENATOR SAVINO: There you go.

MEG SANDERS: My name is Meg Sanders, and I'm the CEO of Gaia Plant-Based Medicine in Colorado.

We currently are fully compliant with 16 state and local medical-marijuana licenses in four jurisdictions.

I'm also a mother of two, a formal financial-compliance manager, and an active volunteer in my community.

I was also the only industry representative on Colorado Governor Hickenlooper's Amendment 64 Task Force for implementations of rules and regulations for legalizing marijuana.

I am joined by Charles Feldmann, our corporate council.

I welcome and appreciate this opportunity to address the roundtable on behalf of Gaia, and to give the perspective of a fully operational and successful medical-marijuana company.

We've been in operation since 2010, and have seen and experienced the evolution of Colorado's medical-marijuana program.

Our company has also been working around the country for the past three years on marijuana-reform legislation at the local, state, and national level.

We have the benefit of seeing many models in action, and are confident that the New York's legislation will yield the best law in the nation,

as the best model to fit within the guidelines of the August 29, 2013, Department of Justice memorandum.

To that end, the most important parts of the proposed New York law are seed-to-sale tracking, limited licensing, legitimate medical need, strong criminal and financial background checks on industry owners and employees, and partnerships with all government jurisdictions.

Seed-to-sell tracking is an essential tenet that tracks a plant from its viability, directly to being purchased by patients, using technologies such as RFID, and through internal and enforcement audits.

All medicines should be tracked back to its original plant regardless of where it is in the supply chain. This is a key element to preventing diversion.

Limited licensing goes hand in hand with tracking, because it is about enforcement, and the ability for the state and local jurisdictions to adequately and efficiently regulate and enforce the laws.

A manageable number of registered organizations is necessary and fosters cooperation

between regulators and businesses.

We have seen in states where there are hundreds, or even thousands, of licensees, that effective enforcement and regulation is difficult or virtually nonexistent with the allotted resources.

Legitimate medical need or involving a doctor who has a relationship with the patient is imperative to ensure the integrity of the program, and keeps medical decisions where they should be: between doctor and the patient.

Strong criminal and financial background checks assure the public, the state, and the federal government that the participants in the industry are respected and responsible business owners.

Having business persons involved as partners in growing this industry means putting the patients first, and not just legalizing people who are currently conducting an illegal business.

Having the actual proven ability to grow medical-grade marijuana is also extremely important, as -- so much so, that it should be part of the bill.

A medical-marijuana program without medical-grade product for patients is a failure.

One thing this legislation does not fully

address is the importance of patients having access to a variety of delivery methods and products to suit their individual medical needs and personal preferences.

While smoking or vaporizing marijuana remains the most common choice by patients, and is considered the quickest and, often, most-effective delivery method, many patients will use a variety of delivery methods, such as oils, tinctures, lozenges, for example.

Which is why I'm here to strongly encourage you to specifically allow for infused products within the New York medical-marijuana program, in addition to the more common and preferred combustion or vaporizing of the dried product.

Infused products have been a staple for many patients in medical-marijuana states throughout the country, which we have seen firsthand.

Many who use our infused products do so at night before bed, allowing them to sleep soundly throughout the night without experiencing any psychoactive effects.

They are also a preferred alternative for those who choose not to smoke or vaporize the product, or who do not need the immediate relief

that only comes from combustion or vaporizing of dried marijuana flowers.

With regards to smoking or vaporizing the dried marijuana flowers, this remains the most common delivery method, and is important to not fall into the trap of thinking of medical marijuana in the same vein as cigarettes.

Commenting on the findings of Donald P. Tashkin, M.D., emeritus professor of medicine, and medical director of the Pulmonary Function Laboratory at the David Geffen's School of Medicine at UCLA, and the 30-year U.S. government-sponsored study, McGill University's Dr. Mark Ware concludes:

"Cannabis smoking is not equivalent to tobacco smoking in terms of respiratory risk. Cannabis smoking does not seem to increase risk of Chronic Obstructive Pulmonary Disease (COPD), or airway cancers. In fact, there is even a suggestion that at low dose, cannabis -- at low doses, cannabis may be protective for both conditions."

Ultimately, it is up to the patient and their doctor to decide the best method of delivery, and make medical decisions accordingly.

At this time, I would like to turn it over to

Attorney Feldmann, and I thank you again for your efforts on this important piece of legislation, and I look forward to answering any questions you may have.

SENATOR SAVINO: Thank you, Meg.

[Applause.]

SENATOR SAVINO: Charles Feldmann is the corporate counsel for Gaia, and he's going to address some of the issues about security, and how you set up an operation.

You don't have a prepared statement, though, right, Charles?

CHARLES FELDMANN, ESQ.: No, I don't.

So I had more -- instead of sitting, hearing a speech from yet another attorney, I'd love to answer any questions about Colorado's model.

My background, I was a federal prosecutor, and defense counsel, with the Marine Corps.

I was also a DEA drug-state task force commander, and prosecutor, in Colorado.

So I come from a very strong law-enforcement background.

Have worked actively with our local law enforcement to implement a very robust law-enforcement model in Colorado.

And, would love to share any of those insights or backgrounds that would be helpful.

SENATOR SAVINO: Senator Robach -- well, first, we've been joined by Senator Ruth Hassell-Thompson from the Bronx and Westchester.

[Applause.]

SENATOR ROBACH: I was just curious, Charles:

So -- just -- this is my perception.

So, you only hear about California and Colorado all the time. That's all I see in the media, but I believe there's, like, 19 or 20 other states --

Correct?

CHARLES FELDMANN, ESQ.: Correct.

SENATOR ROBACH: -- that have this, and it seems to be very well controlled, very well enforced, very medical in nature.

And I think that's important for the record.

Is that pretty accurate?

CHARLES FELDMANN, ESQ.: I think the two states you just mentioned show the dichotomy in the industry between an unregulated state, California; and a very, probably top of the pile right now, law-enforcement-regulated state of Colorado.

Your bill, I think, will be the most-cutting edge, if that passes, because it creates more regulation and more control, which is, again, what the federal government is looking for for states passing medical-marijuana programs.

SENATOR ROBACH: I've had others just suggest, anecdotally, that Connecticut has a very good application of this that's worked, virtually, seamless, with no controversy whatsoever.

Do you think our bill would be even above and beyond that, as this?

CHARLES FELDMANN, ESQ.: It will be.

Connecticut -- once Connecticut is actually implemented and rolling out, I would agree with you, will be that robust enforcement action that they're looking for.

Yours is very similar to that.

And, again, the distinction from Colorado that is better, according to the federal government, what they want to see, I think is that limited licensing, that allows your regulators to really keep a tight lid and control over who's producing, where it's going, how you're tracking it, how that medicine is getting from the grower to the actual patient.

The federal government has told us they're very concerned about diversion; diversion to other states, to cartels, organized crime.

And that limited licensing scheme, that seed-to-sale scheme, really helps your regulators enforce that.

SENATOR ROBACH: Thank you.

SENATOR SAVINO: Any -- just a few questions for you, Charles.

And I think your experience, not just in Colorado, but as a former federal prosecutor and a DEA agent, is critically important in helping us create a program that will survive the scrutiny of the federal government.

As you are aware, earlier this year, the Governor issued an executive order, that he feels that the State should move forward without legislation; we should move faster, not slower. And he resurrected a piece of legislation that was passed in the 1980s, that we recognize as unworkable.

But one of the things that it provided for, was that we would obtain medical marijuana from other states, so that it could be distributed through 20 hospitals in New York State.

Could you speak to what's wrong with that proposal, and why the federal government would not allow that?

CHARLES FELDMANN, ESQ.: One of the major points of law enforcement, on the federal side, and a lot of what I do is analyze that evolving federal position when it comes around medical marijuana, is you cannot have interstate trafficking.

So you can't -- and you look at the Colorado model, you can't come to Colorado and purchase medical marijuana, and then take it home with you. It's got to stay within that state.

So until something drastically changes on the federal level, that model just will not work. You'll fly in direct contravention of what the Executive Branch has told us that they're going to allow to happen.

SENATOR SAVINO: In addition, I believe one of the proposals was that, for hospitals in New York State to distribute marijuana that was seized in drug raids.

Meg, as a producer of medical-grade marijuana, do you believe that that is something that patients should be exposed to?

MEG SANDERS: Not at all.

Our product is tested at multiple levels. We use the highest quality control in producing a very professional grade, medical-grade product.

I can tell you that drug dealers that are growing this on the street don't necessarily offer or exercise that same control.

And that would be my concern, is: What's in that product? What pesticides might have been used, which would be a huge concern to me, to deliver that to anyone with a compromised immune system or any type of diseased state.

SENATOR SAVINO: Senator Hoylman.

SENATOR HOYLMAN: Thank you.

Thank you for being here.

And thank you, Senator Savino, for organizing this, and for your advocacy on this bill.

I wanted to ask about the specifics regarding medical-grade marijuana.

Who actually regulates that, or does anyone at this point, in Colorado, in terms of quality control?

MEG SANDERS: Right now, the regulation is -- we're still working on that.

It's up to me, as a business owner, to test my product. And it's up to me to vet who I'm

testing my product with.

And that is, right now -- we're seeing -- we're seeing that change.

Connecticut has a strong testing method, or testing methodology, in their bill.

And I would encourage New York to look at that, as well. You know, making sure that any testing laboratory is sanctioned by the State, and is being certified by the State, as far as their testing methodology.

One of the largest pieces that's missing in Colorado right now is a standardized test sample that everyone's calibrating their machine with.

And that just doesn't exist.

SENATOR HOYLMAN: And do you foresee the federal government stepping in at some point, the FDA, in terms of monitoring quality?

MEG SANDERS: Well, I would say, as far as the actual dried product, this is more of a plant-based medicine, instead of a pharmaceutical-based which would fall more under FDA.

Plant-based medicine, right now, falls more under supplement guidelines, and I would say that that's more accurate.

As long as we're clear on our labeling about what this does and does not do, and how it's been tested, and the research that's been done in order to say this is specifically for that, we can't do that. We would have to be very clear about statements on our labeling.

SENATOR HOYLMAN: Thank you.

SENATOR GRISANTI: Just a quick question: The -- can you explain a little bit, so this way it's clear to those that are trying to get educated on this, that the plant itself, the genetic splicing of the CBD chemical that's used in the oil to treat other -- the seizures, the individuals from my district that are actually coming down to Colorado to get residency?

Can you expand on that a little bit, and what the level of THC is on that side of the oils?

MEG SANDERS: Well, I think what's important to realize, is that there are multiple aspects of this plant that treat all types of ailments.

And, yes, there are some specific anecdotal data that we're seeing in Colorado with regards to high CBD, low THC, strains, but, there are multiple ways that this plant helps people.

And as you've heard testimony, as far as the

different pharmaceutical-grade products that were given to patients prior to their access to medical cannabis, are far more dangerous opiates and other types of drugs that I would say, when you look at cannabis as an alternative, it's a much, much better alternative.

It is important that we look at all the aspects, and make sure that we are providing high CBD strains and high THC strains.

There's many aspects of this plant that are important, and we want -- we don't want to get lost into picking the plan apart. There's lots of ways that the plant helps many types of ailments.

SENATOR GRISANTI: And with the -- it's important what you said, because -- and what Senator Savino said, because you do not want to have the type of marijuana that has been confiscated through DEA agents in one state and brought over here, because you don't know what's in it.

MEG SANDERS: That's correct. And there's no way to -- you know, if you're just somebody picking up various flowers from -- that have been seized in a drug raid, to know what those strains are.

The way we grow, we know what our strains are. We test every single plant, every single

batch, as far as what that specific strain has in its component makeup, as far as THC, CBD, and many other factors of the plant that are very important.

So that would be almost an impossible thing to do. You would, basically, have to test every single flower before you could give it to the patient.

That's not very realistic.

SENATOR GRISANTI: Okay. Thank you.

CHARLES FELDMANN, ESQ.: And I would add to that, looking at their organization, I mean, this is a white-lab-coat laboratory-type facility, where this is grown, versus coming from DEA.

I mean, we often seized cannabis in meth labs, so I can't even imagine what that has been subjected to or been around, that you're going to treat a patient with.

SENATOR SAVINO: Charles, can -- I want to go back to a -- more of the security issue, because a lot of the questions that have come up from members over the course of this legislative process, is, you know:

How do you prevent diversion?

How do you create a secure facility?

What does a medical marijuana grow-house look

like?

And how do we track the plant: the seed-to-sale?

And can you describe what goes into, you know, running one, securing it, and making sure that that product stays in the streamline that we want it to?

CHARLES FELDMANN, ESQ.: First, it takes a lot of financial resources.

So, they have built a warehouse fortress.

We use special-forces security companies so that you cannot actually get into that. Every aspect to that warehouse has a camera on it. And I mean, "every aspect."

It is more regulated than the alcohol or gaming industry.

Our regulators have direct access to all of that video.

All employees, all investors, all owners, anyone with a financial component to the industry, has a financial, a criminal history, and a moral-character background check on that.

So that's just the beginning of limiting who's going to participate in this industry, so that you end up with a medical-grade.

From there, there's transportation manifests that the regulators get every time you're going to move medical marijuana from the grow to an actual dispensary. It's weighed, it's measured, at numerous points.

And then every plant, from the beginning until the very end, has an electronic signature attached to it.

That, Meg can walk into her warehouse, or a State regulator can walk in unannounced, and with the push of a button, code every plant in that warehouse: where it's going, where it's been.

And that's been revolutionary.

That is the exact opposite of what California has, which is why California has so much federal involvement, and other states don't.

SENATOR SAVINO: And can you -- sorry.

Can you -- describe the dispensary, because that's one of the questions I've gotten from many people: We don't want people being able to walk in off the street like it's a candy store.

So if you -- I've been to Colorado, I've been to Jersey. I've seen somewhat of a difference there.

But if you could describe for the members

what a dispensary looks like, and how you control what goes on in the dispensary?

MEG SANDERS: Yes.

So our dispensaries have controlled-access points.

So what that means is, prior to even being into the area where there's medicine available, your "red" card is -- your "red" card, which is your patient card in Colorado -- is verified, along with the picture ID, every single time you come in.

It's not, Hey, I know you now, come on in.

That's not how it works.

And then, once you're verified by our front-office staff, then you're buzzed in to the actual dispensing location.

At that point, our people behind the counter, our consultants, would then bring your profile up and ask you specific questions about, you know:

Do you have any concerns about medicine that you received in the past? Or any question as far as, how -- the effects that you had?

And then they would dispense prepackaged medicine to you, that then is -- and that medicine is in child-proof containers. It's then put in a sealed bag, with your receipt, and then you're

off -- off you go outside to -- of the dispensary.

And all of this is done on camera, again, which is kept -- this is one thing that we have to do in Colorado, we keep all of our video for 40 days so it can be reviewed at any time.

And that's part of our internal process, as well as the state regulations.

SENATOR SAVINO: Yeah, that is pretty good.

Oh, one final question: As you know, Colorado has made a lot of news on the marijuana policy, yes, because of the change in the legality of recreational use.

But, you know, people who are opposed to marijuana use, whether it's recreational or medical, often cite that if we allow people access to marijuana, we're going to see an increase in DUIs and DWIs.

Has that manifested itself in Colorado?

CHARLES FELDMANN, ESQ.: You know, I would say the opposite of that.

It's funny that we just have that question, because I was speaking to one of our local sheriffs, a staunch Republican. He and I were both part of the failed War On Drugs, as drug task-force commanders.

And he just commented, he was like, "I wish I had evidence to support, you know, my initial position against medical marijuana." But he says, "I've got something. I've seen no increase in any sort of criminal activity."

Whether it's juvenile diversion, whether it's DUIDs, we just have not seen any of that growth.

And, again, would I attribute that, not to just luck, but a very strict regulatory model. We really control it.

Our regulators would tell you it's more controlled than the gaming industry, which, as everyone knows, is as strict as it gets.

SENATOR SAVINO: Thank you.

Assemblyman Titone.

ASSEMBLYMAN TITONE: Thank you, Diane.

You had mentioned going to the dispensaries, that the patient is asked several questions.

Is that mandated, those questions, that dialogue?

MEG SANDERS: No, it's not mandated at all. It's just part of our customer-service experience.

We want to make sure that if a patient has any questions about any of our products, that they get as much information as possible.

And then, that way, they're also able to interact directly with their doctor, as far as any specific questions they have on strain availability or delivery methodology; and, so, you know:

Should I use a tincture?

Should I use a lozenge?

Should I vaporize the product, or should I use an oil?

Those are many aspects of each product line that you want to explain.

ASSEMBLYMAN TITONE: It's impressive to me, because I think about me just going to, you know, my drugstore, you know, a big-box store, and the question I get is, you know, "What's your insurance?" And there's no dialogue.

So I was just wondering about that, whether it's mandated or not. And it seems to be an important dialogue that -- whether pharmacists or a dispensary should have with a patient.

MEG SANDERS: I think patient education is a critical element of any successful medical-marijuana program.

And because there isn't this vast amount of documented research that we can all point to, it's really the dialogues that are creating the

awareness, and that needs to continue.

You've heard testimony today.

It's critical that we hear from the patients how this medicine is helping them.

ASSEMBLYMAN TITONE: Thank you.

SENATOR SAVINO: Senator Hassell-Thompson.

SENATOR HASSELL-THOMPSON: Forgive me if my question is a little off from where you've been discussing, but, I'm going to be holding a series of town meetings, because there is a concern among the religious community, and some leaders, that marijuana poses a dangerous threat in many communities, because they believe it's a gateway to other drug use.

What I've tried to -- what I've tried to impart is that the focus should not be on medical-marijuana use, but recreational.

But how do I combat that as an issue?

I mean, even in my -- even in my office yesterday, discussing the planning of this, there is disparity in thinking about whether or not this is true or not true.

And I guess I'm asking, because I don't get the opportunity to sit before somebody who's had the kind of experience that you have, that might be able

to help us with that aspect as well.

CHARLES FELDMANN, ESQ.: That's a great question, a great issue.

I think the real issue, when you talk about, from a War-On-Drug perspective, and gateway-drug labeling, it's substance abuse by youth.

And everyone agrees, from top to bottom, that that's an issue that has to be addressed continually.

To single out medical marijuana as the gateway drug to substance abuse by youth, I just think is unsupported by the facts, it's unsupported by the culture -- the law-enforcement culture that I was a part of.

So I think when you really educate people to what's happening, and what is not happening, you win that argument.

And, medical marijuana that we've seen in very controlled regulatory models, where you're not allowed to have diversion.

And, again, it's similar to how we regulate the alcohol industry.

We do ID checks. We actually care about keeping alcohol out of underaged drinkers.

And it will be the same philosophy and the

same routine that you'll have to implement with medical marijuana.

So it's a very the analogy is very close to how we regulate the alcohol industry.

But what I've seen, coming from enforcement perspective, it is just inaccurate to single out medical marijuana as this devil of a gateway drug to youth.

It just turns out not to be that.

MEG SANDERS: May I add one thing do that?

SENATOR HASSELL-THOMPSON: Sure, please.

MEG SANDERS: One thing in Colorado that we've seen, obviously, marijuana is on the front page every single day.

The "Denver Post" now has an actual marijuana editor, that, just about every single day, you'll find an article related to the industry, or to the medicine, or to recreational, or -- I mean, you name it.

The point being, is that it's a topic of conversation at dinner tables every day.

This -- the discussion point, the education, is a key element to awareness, and to preventing teenager or underage use of any type of controlled substance, whether it be prescription drugs or

medical marijuana or drugs from the street.

That is one thing I can say.

It's just amazing to me the conversations that are happening, and I think that's a very important point to realize, is that, as an industry, as a state, Colorado has done a very good job about educating its residents about this drug, as well as many other things.

SENATOR SAVINO: Assemblyman.

ASSEMBLYMAN TITONE: Just an observation:

I'm not aware of any studies whatsoever that prove the theory of gateway drugs.

In fact, if we were to talk about gateway drugs, one over the other, my point has been, and I maintain it, until otherwise proven incorrect by science, is that if you're going to take the whole theory of gateway drugs, you need to start, first, with the kid rolling down a hill to get dizzy, and then you can say that that's a gateway drug.

So I don't buy into the gateway-drug argument or debate.

Thank you.

SENATOR SAVINO: And even if it were a gateway drug, then the question is: What's it a gateway to? The legal, highly addictive, dangerous

narcotics that you can get from your doctor.

But, do we have any other questions for Meg and Charles?

No? Great.

Thank you very much.

[Applause.]

MEG SANDERS: Thank you.

SENATOR SAVINO: We are going to now hear from -- because I heard a couple of times, questions about: How do you package it? How do you keep it child-proof?

We're going to hear from Dean Petkanis, who's the founder, chairman & CEO, of KannaLife. He's going to talk about the business of -- science of packaging, and labeling, how detailed it should be, and how we can make sure we don't divert it.

Session?

Oh, we're competing with the session right now, so people will come and go.

DEAN PETKANIS: Good morning, Senator Savino, members of the Senate and Assembly.

I want to thank you, and the family members here, and the patients in this room, and the children, for allowing us this opportunity to speak before the Panel.

By way of background, I am the chairman, chief executive officer, of KannaLife Sciences.

My co-founder and partner, Thomas Kikis, is sitting here to my right.

And, we are the only company in the United States within the industry that has a license with National Institutes of Health, Office of Technology Transfer, for the 507 Patent, which are, cannabinoids is antioxidants and neuroprotectants.

We do have several facets of our business, including drug development and discovery underneath that patent, and the standardization practice, quality-control and assurance in packaging of medical marijuana.

My background in the industry goes as far back as 1992, excuse me, where I was involved in the finance of a company that developed paclitaxel. That's a generic drug for the treatment of cancer, and that came from the bark of the Pacific yew tree.

So here we have the instance where a plant, that is a medicinally-purposeful plant, can be used for compassionate care and treatment of a variety of different disorders and maladies.

It's probably the most potent pharmacologically active plant known in pharmacopeia

that has not been released for medical use, and has been federally restrained by the Controlled Substances Act.

So I applaud you for your efforts, and the State's efforts, in bringing forth a medium in which the product can be used for medical purpose.

We started this company 4 1/2 years ago, with the scientific approach of standardization and quality control and assurance of packaging.

And part of that was to bring forth what the chemical substances are within the plant -- thank you -- and to also build a monograph that would help doctors look at the plant and the chemical substrates and ratios to which the chemistry operates within the plant, and allay it across a pantheon of disease indications.

And everybody here may know that there have been a variety of different diseases that have been targeted for use of -- medicinal cannabis is used for, you know, including migraines, irritable bowel, MS, intractable pain from chemotherapy and cancer treatment, nausea, wasting, appetite suppression, appetite improvement.

How does a doctor and a clinician understand what the methodologies and prescription methods

should be used for in regards to prescribing medical marijuana?

So we've developed a database, as well as a packaging solution, for the industry, so that participants, such as Gaia, which stands head and shoulders above others in the state of Colorado.

We also have formulary operations in Colorado and in Vancouver.

So, we've identified some of the market participants, and their ways, means, and methods on how they approach their standards and practices, because it's very much what Meg Sanders had said, in terms of practice.

The FDA will look at botanical medicaments as nutraceuticals and supplements. And they look at it on label, and on panel, for Code of Federal Regulations, Title 21:

What are you putting on that package?

What does a patient know they're consuming?

How does a doctor know what the patient is consuming?

And much of that, I think, should come together in the form of traditional health-care models and Western-medicine medicinal practices.

And if you bring the two together in

standards and practices, then you'll have, I think, a robust market for the methods and means of treatment using medicinal-cannabis [unintelligible].

We do have a sample of what we would call an "early package solution" that was used by a market participant in Colorado, a grower and dispenser.

On the front and the back are all of the labeling requirements by the State, as well as a body chart, to help doctors identify the hot spots on the body, and the potency of the plant, so that a doctor can actually get clinically involved, as opposed to, just giving a patient a card to go and into a dispensary, and have somebody in the dispensary stick their hand in a jar, pull out some bud or flower, put it in a bag and give it to a patient.

So, 4 1/2 years ago we identified the needs of a marketplace, and felt that we could much be a participant in helping standards and practices, certifying growers, certifying dispensaries, certifying producers, in their goals towards bringing medicine to the market.

And much of what you would find on that package would be cataloged in a database -- in a HIPAA-compliant database that doctors could go to,

and also use a soft clinical diary with their patients on followup.

This will also help bring more knowledge and experience to the marketplace in traditional health-care models of treatment.

So, as a New York-based company, we're proud to say that we're the only of our kind in the country, with a license, but also with the opportunity to help the State bring forth adjustments, going forward, in compassionate care and controls and methodologies that more align themselves with the Western philosophical practice of medicine, and also the FDA's "Guidance on Botanicals" which was written in 2004.

In closing, I would pass on to Tom Kikas, if he has any thoughts on the matter.

But as I look around the room, and I know some of you here, you know, I have a real strong burden for children. They rely so much on us and our abilities to be sensible in helping them deal with their maladies and disorders.

They didn't ask for this.

And my faith reminds me, in Matthew 19:14 and Matthew 18:6, where the Great Physician talked about children, and our responsibility in making sure that

they get what they need without any hinderance.

[Applause.]

SENATOR SAVINO: Thank you.

You're going to testify, too, or you're just going to answer questions?

THOMAS KIKIS: No, I'm just going to answer questions, I think.

SENATOR SAVINO: Okay.

First of all, thank you for that.

This -- I'm not sure if everybody can see this, but one of the many concerns that have been raised, and I think part of what is driving the concern from people who have talked to you, is about potential diversion, because I think there's a misconception about what could happen with a medical-marijuana dispensary, that you could go in, I guess, buy it and have it in a paper bag, and then it disappears.

So, I think it's very important that people see these, this packaging that you use in your dispensary, because it labels: The name of the dispensary. The date it was packaged. The date it expires. There's a bar code.

So -- and in addition, it's sealed.

Now, if I'm a patient in a state that has

medical marijuana, and I'm approved to use it, I'm registered with the State, I have my "red" card, and I need it for my particular condition, I'm only going to get so much at a time; right?

DEAN PETKANIS: That's correct.

SENATOR SAVINO: And if I were, you know, I guess, irresponsible enough to give it away, that would have a problem -- I would have a problem then, obtaining the medication that I need for my condition?

DEAN PETKANIS: That's correct.

SENATOR SAVINO: And one of the ways we control that is through these very strict packaging.

DEAN PETKANIS: That's correct, yes.

SENATOR SAVINO: You also have a patent, don't you, from the National Institute for Health, on how medical marijuana can treat traumatic brain injuries. Is that true?

DEAN PETKANIS: Yes.

We're in two areas of encephalopathy right now: One is on an exclusive basis. The other is being driven right now on a nonexclusive basis.

We chose the disease pathology underneath the patent that spoke to oxidated stress in the brain as a result, ironically, to alcohol consumption and

ethanol toxicity.

Patients that have cirrhosis will develop ammonia and ethanol toxicity in the brain. And it has been scientifically, I would say, suggested in an intramural research study at NIH, which is the subject of the patent, that cannabinoids are reasonably decent antioxidative stress relievers and neuroprotectants.

So, we looked at the neuroprotectant side, and glad to say that, in our preclinical studies, so far, we've indeed assessed that we have some very exciting drug discovery work on the way that protects the brain.

Now we're moving into trauma, traumatic injury, which is also a big subject now for families that have children that play full-contact sports. Concussive injuries is a serious issue now.

So the patent from -- oddly enough, the United States government is the holder of this patent, and we're a technology partner, with National Institutes of Health have stepped up as a commercially viable company to produce a drug underneath that patent for patient use.

So, we chose those diseases.

It just shows the diversity of the means

cannabinoids in medical care.

THOMAS KIKIS: Actually, yesterday, Sanjay Gupta has his -- a series, "Weed2," and he actually mentions the patent, because it says: How can the U.S. government have a patent on cannabis, and then how can cannabis be illegal?

So he makes that argument.

And I think, you know, this is the actual patent that we have. We have the 507 Patent, and cannabinoids as antioxidants and neuroprotectants.

And I think, ultimately, it comes down to how it's packaged, how's it seed-to-sale operations go, per state.

And, I mean, I can have Dean speak to that, actually.

DEAN PETKANIS: Well, I think Gaia hit it on the nail -- the nail on the head, in terms of their practices.

Colorado is now requiring RFID-chip standards, so every plant and seedling is known from the point that it's been planted, to the point of harvest and delivery to the market.

We take it from that point in the packaging solution that we offer for the participants in the market.

But I did want to touch on something that's really, I think, is interesting.

The detractors that talk about medical marijuana not being proficient in use for patient consumption are also the same detractors that don't want economic growth or stimulate economic growth.

This is the second largest cash crop in the United States. We have about 25 billion of illegal product coming into this country untaxed.

I dare say that if I tried to bring mangos home from South America, I'd be stopped at the airport.

But in this instance, the packaging and standardization of the domestic producers is important, because it also offers jobs -- the creation of jobs, a higher quality of skilled labor in the scientific field, for testing -- laboratory testing on site.

And, harvesting, the agricultural business in the model, I think will be a boom for NYSERDA and the state of New York, as well.

And when the Controlled Substances Act is violated in on itself, and I think implodes on itself, we will have, I think, a very interesting pharmaceutical-grade naturopathic remedy that can go

across border.

I know Canada has just approved a health -- the Health Canada initiative.

So, if there are products that can be developed in a very innovative nation that we are, scientifically, I think we could make export products out of the field of cannabis.

So, I think there's a multiplier effect that's involved here, as well.

SENATOR SAVINO: Senator Hassell-Thompson, you had a question?

SENATOR HASSELL-THOMPSON: I was -- I, like you, was examining the packaging.

And, how does it come?

I mean, this is an empty packet.

DEAN PETKANIS: Correct.

SENATOR HASSELL-THOMPSON: Okay. Is it -- is it, uhm -- I keep wanting to -- you know, like, sometimes coffee is --

SENATOR SAVINO: Ground.

SENATOR HASSELL-THOMPSON: No, I'm not talking about the grinding.

UNKNOWN SPEAKER: Vacuum-sealed.

SENATOR HASSELL-THOMPSON: Yeah, vacuum-sealed.

Is it vacuum -- are those vacuum-sealed?

DEAN PETKANIS: I can take you through the process.

We have a provisional patent that's filed on the process method -- methodology behind us.

So, there's robotics equipment that will pick and pack. At the same time, you have labeling equipment. Then you have printing equipment for the labels.

But on the robotics equipment, it depends on how you're going to fill it.

You can fill it with flower, which has -- you know, is fairly chunky, or you can fill it as grinds.

In both cases, you could do a vacuum flush or a nitrogen flush at the point of packaging, and bar seal it, so you can create a hermetic seal within the package.

Nitrogen flush is fairly -- it' fairly common in other foods products that are packaged as such.

So you do have a bar seal at the end of it. At the top will be a heat seal. And you can also take away the notch there, or leave the notch there, and have a resealable bag.

But, it's at the point of packing in the

robotics that you can add the hermetics of -- in terms of hermetic sealing process, but doesn't necessarily have to be.

SENATOR HASSELL-THOMPSON: Okay, I guess my curiosity, like Diane says, it's almost tamper-proof, which, you know, in looking at it becomes very, very important.

Dosages, you know, I'm thinking about medical doses.

So, I noticed that there's a coloration, there's a brand. There is a, variety?

SENATOR SAVINO: Strains.

DEAN PETKANIS: Right, different strains.

SENATOR HASSELL-THOMPSON: Is it a variety or a strain?

DEAN PETKANIS: Well, there are different strains.

Anecdotally, the strains have these wonderfully colorful names. Everybody goes and assesses the value of the product based on the strain name.

SENATOR HASSELL-THOMPSON: Right.

DEAN PETKANIS: What we are doing in our monograph, is we're taking the chemicals in the plant. We have a 32-point system, a testing system,

for third-party certification.

16 cannabinoids and 16 terpenoids are assessed, along with the pesticide-control issue and mold-control issues.

So, once all that comes into a database, it gets filtered across a previous research white paper that's been done on the use of cannabinoids for medical treatment.

So, we'll probably be producing a more accurate -- we'll be producing more accurate data on the use, the medical use, rather than the anecdotal model that says, Use bubble-gum cush for everything.

The number in sequencing that we provide on the packaging is meant to provide doctors with an idea where the hot spots on the body are right now, but also to show doctors that, if they were to prescribe something, by means of a treatment for irritable bowel, you probably would not want to be prescribing a high-grade sativa, which is one of the phenotypes of the plant species.

You have three phenotypes:

You have a sativa, which is highly psychoactive, very operative to the brain;

You have an indica, which is more operative to the body;

And you have ruderalis, which is less operative than either, but it's still used, traditionally, in Russia as a means and method of treatment, some -- more digestive.

So, ruderalis is closer to indica.

So with all hybrids of the strains that are out, there one must look at the pharmacology of the plant and try to break down the chemical components, because, essentially, that's what drugs are generally made from.

I have to go back to Taxol for a moment, because it's important to note, when you're taking plant-based medicines and you're synthesizing them, ultimately, to make a full drug out of that that goes through the FDA, those processes look at the active ingredients in the plant, try to isolate and purify them.

Similarly, we have a very complex plant here in the flower, and doctors should know what the ratio of those chemicals can and cannot do.

You don't want to have contraindications.

You don't want to give somebody who may be slightly schizophrenic a high-grade sativa that over-occupies the CB1 receptor. And in that instance, you can have an abusive process of

medicine. Lack of knowledge.

So we look to improve on that. That's our goal.

SENATOR HASSELL-THOMPSON: Okay, because that was my curiosity, in terms of, when I look at the package, for instance, I'm thinking about a prepackaged medication, and I'm thinking of it in terms of the doses. So the dose will be 50 milligrams, let's say.

But that's not what I heard you just describing in terms of how medical marijuana works.

DEAN PETKANIS: It's a very good question, Senator.

And I know I have some colleagues in the industry that have formed solutions that already have dosage regulation; however, that may not meet the need of a doctor prescription. And, administration is a challenge.

Say you have a patient that says, I just want to smoke the flower, well, the doctor has to be knowledgeable about weights and measures.

And based on what it's in that package, and the potency of it, a doctor can say that three-quarters of a gram will equal one cigarette, and you need not smoke more than half of that

cigarette a day.

And that will give you the gram requirement or the dosage milligram requirement, based of that package, based on the cannabinoid structure.

And that's where, I think, the clinical practice comes into play. Doctors have to understand weights and measures when they're giving a patient a prescription.

They do it now, but tablets are already in the prescribable form.

But that's the flower.

Then you have products that are made as infused products or capsuled products, or flowers that have been dried and ground and encapsulated. Those already have a body of weight to them, where they will have a milligram dosage as prescribed.

But that's another matter, I think, for industry growth.

Right now, from what I understand today, that everybody's talkings about just the flower.

SENATOR HASSELL-THOMPSON: Just the flower.

DEAN PETKANIS: Yeah.

SENATOR HASSELL-THOMPSON: Okay.

All right, because, you know, many of us in the Legislature are conversant, I guess, with the

legislative side of it, but very few of us are at all conversant with the kinds of questions that we're asking.

So, you know, we're not just asking to fill up time. We're asking because we really need to be able to understand it, particularly if we have to "sell it" to our colleagues in terms of getting their support for it.

So, I appreciate you answering the questions.

DEAN PETKANIS: My pleasure to do so.

SENATOR SAVINO: Thank you.

[Applause.]

SENATOR SAVINO: Next -- there's been not a lot of discussion about what it takes to actually finance a medical-marijuana business; and, so, we're going to hear from Jake Schrader, who's co-president of Articulated Investors, to talk about setting up a business, and what it would look like.

Then we're going to hear from Jason Pinsky from the cannabis industry.

And then we're going to shift back to patients.

Before we start, Dean, can I keep this? Or is there --

DEAN PETKANIS: Yes.

SENATOR SAVINO: Yes? Thank you. I can show it to people.

Thank you.

JAKE SCHRADER: Senator Savino, Roundtable participants, and members of the audience:

My name Jake Schrader, and I am co-president, along with Phil Gottlieb, of Articulated Investors, a New York-based company that has been exploring, researching, and recently investing in the medical-marijuana industry throughout the United States.

Prior to forming our company, I was a partner at Cantor Fitzgerald in New York City.

I'm a born-and-bred New Yorker. I have never lived anywhere else. I work here, and I am raising my family here.

That is why I am pleased to support the legislation that you have worked so hard at crafting.

At Articulated, we have studied, researched, and seen firsthand the medical-marijuana industry and its associated parts, and we believe that the New York program will be the best in the United States should it become law.

As investors, and developers of support

products, and investors in existing businesses, our discipline has always been to work to identify good actors within the industry, and then apply our capital in order to help them succeed.

Unfortunately, many states have programs that are not nearly as thorough or well-regulated as what New York is proposing; and, so, identifying the good actors in those states can be very difficult, and there are some states that we simply will not consider working in.

With your legislation, New York will become not only the state in which we live, but also one in which we are able to work directly as opportunities present themselves to us.

We see clearly that the framework you have put together will allow for a tightly regulated, controllable medical-marijuana program that benefits the public health of New York and has safeguards against diversion.

These are all integral to ensuring the integrity of the program, and fall well within the eight points as outlined in the August 29, 2013, Department of Justice memorandum.

Further, the limited licensing model that you have put forth will allow for adequate and efficient

enforcement and administration of the program by the State of New York and the host communities.

The opportunities for economic benefit are many. The State, the host communities, and taxpayers stand to benefit, both from the new tax revenues, and from cutting out the portion of law-enforcement costs that is currently associated with the thousands of New Yorkers forced to use the black market to meet their medical needs.

In addition, thousands of direct and indirect jobs will be created within the production facilities and in the dispensing facilities, as well as supporting them. These will comprise all types of professionals; from cultivators, to executives, accountants, lawyers, administrative, security, marketing, digital media, researchers, and many more.

In Colorado [laughing].

Forgive me.

In Colorado, a state with approximately one-quarter of the population of New York, 12,000 direct and 8,000 indirect jobs were created under the medical-only model.

We see economic opportunities in technology, which Articulated is developing, to assist with

cultivation, monitoring, and control; in real-estate investment and construction; in research and development; and we are also exploring an investment in a consulting company focused on the industry.

Allowing for multiple delivery methods in addition to the cannabis flower, such as oils, infused products, tinctures, creams, and more, to suit a patient's needs will also give patients more choices, and the ability to determine, with their doctor, what is best for them.

And it cannot be overstated that this also means more jobs and economic benefit.

While the economics alone are compelling, that is not the reason we got involved with this industry, nor why I am here before you today.

The reason is, that the passaging of this law will have a tremendously positive impact on the health and well-being of hundreds of thousands of New Yorkers for years to come.

The real opportunity here is to do well financially by doing a really good thing for our families and our neighbors.

Medical-marijuana patients will benefit from not having to buy their medicine in the street where they have no idea what they are getting or what

chemicals might have been used to produce that product.

There is obviously no quality control or safeguards for these patients who are at such a difficult point in their lives that they are currently willing to risk arrest for their health care.

I, like everyone in this room, knows or knew someone who could potentially benefit from using medical marijuana.

In my case, my mother has long suffered from sarcoma which has required a wide range of highly invasive medical care. Most recently, she underwent a major second major surgery on her scalp, and due to the particular nature of her case, she is now facing a course of aggressive chemotherapy.

While she has never been a cannabis user, she is fully aware of what Articulated is set up to do, and she has asked about the possibility of obtaining some to offset the side effects of that chemotherapy if they are as unpleasant as she fears.

She, too, is a lifelong resident of New York, born in Queens, currently residing in a small town called Philmont.

And it is with absolute conviction that I sit

here before you today and ask that she be given the choice to use this medicine if it helps offset her considerable suffering as she progresses through her course of treatment.

[Applause.]

JAKE SCHRADER: I thank you again for the opportunity to speak, and I ask again that you please pass this legislation for the economic benefits, for all New Yorkers who deserve another option to discuss with their doctor, for my mother, and because it is the right and compassionate thing to do.

[Applause.]

SENATOR SAVINO: Thank you, Jake.

Thank you for, you know, sharing the personal side of this, as well as the professional side of it.

I do -- I would like you, though, to, perhaps, for those who are listening on the live stream, to kind of explain the difficulties of raising money to begin to operate a medical-marijuana program.

I don't think people really -- can't just go to a bank and borrow money, because of the restrictions by the federal government.

So, if you could just speak a little bit?

JAKE SCHRADER: Sure.

You can't even go to a bank and deposit money, let alone borrow it. But, that's probably a larger topic.

At this point, traditional avenues of capital are entirely shut off to the medical-marijuana industry.

And that provides an opportunity for unregulated pools of capital, such as Articulated, to come in and become a de facto investment bank, or provide capital, that, in any other industry with this sort of growth.

And I think the political and, sort of, tailwinds that seem to be behind the industry, typically, banks would be falling over themselves to become involved, but because of the federal prohibition, they're simply not able to make loans at this point, or investments.

SENATOR SAVINO: It sounds somewhat like, in the garment industry, they still have them, but they used to rely very heavily on factors, as opposed to banks, where -- that that's where they would be able to go to get a line of credit, or sell their liabilities or their receivables.

Is it similar to that?

JAKE SCHRADER: My grandfather is in the garment industry, and he never really liked the people who were his factors.

So I hope that we're providing a better service than that, but the analogy is fairly true.

I think anytime the dynamics of a free market are disrupted by a set of regulations or a set of government intervention, then that free market doesn't function as efficiently as it otherwise would.

SENATOR SAVINO: Senator.

SENATOR HASSELL-THOMPSON: Thank you.

I heard you talk about the profitability of the industry.

But it's interesting, I just left a press conference before coming here, of people who are deeply concerned about, as I am, the rise in the numbers of cases of hepatitis C.

And -- but the good news is, for that community, there is a cure.

But one of the gentlemen in the audience said: You know, you're encouraging us to gain access, and it's available, but it's not accessible because the cost is prohibitive.

Because he said that he was part of a demonstration program, so he was able to access the drug and the treatment.

We need to be sure that if we're going to be doing this, that price does not become a barrier, you know.

And I know that people say, Well, people flew to Mexico, and they flew here, and they flew there, to access it. They can afford to pay.

Well, most people can't afford to pay.

If it -- if that would -- you know, if that were not the case, then so many more people would be able to access.

We need to be sure that our participation, while it -- certainly, none of us have a problem with people making money -- I don't. I mean, I don't have a problem with people making money. I want them to be rich, and I want them to be philanthropic with that richness; so, that's not the issue.

But the issue here, is to ensure that we don't create a barrier for people to access it once we have created the market.

And I don't hear any guarantees, and I'm not sure that there's a way.

Yes, it's a free market, and I'm all for that, but, I don't want us to have people become disillusioned because we make it available through legislation, but then it's not avail through cost which we would then not control.

SENATOR SAVINO: That is such an important question, and I can't believe we didn't put it to Meg when she was here, so that's why I signaled for her to come back down.

She can talk about the -- what does it cost? What do patients pay? And how has the creation of a legal medical-marijuana market affected the price of marijuana in Colorado?

MEG SANDERS: I want to touch on a couple of things.

This is an initial step. I mean, ultimately, you know, we would love to see insurance, you know, help cover the cost of medicine, especially something as effective as medical marijuana.

This is a baby step.

So the first step is, let's make sure that patients have access.

The second step is, obviously, keep pushing the federal government to get on board with this medicine, and make sure that insurance companies and

banks can help support this industry, and make sure that everyone has access to it.

What I can speak to specifically, and I can use my mother as an example, who's a -- you know, she's a retired schoolteacher. She was on multiple medications for arthritis and for high blood pressure, and she became a patient last year.

And her medication, even though she has insurance, and has a good pension from her many years, 20-plus years, as a schoolteacher her medication was still several hundred dollars a month, and that's just for traditional pharma.

She's off of most of her medications, and is using a topical, and a sublingual at nighttime, to help her with her arthritis.

And the byproduct of it is, her blood-pressure issues subsided, as well.

So part of the issue is that, in Colorado, the cost of medical marijuana is probably the lowest in the United States. We are very competitive market.

The other part of this, as a responsible business owner, we do allow for patients to have a sliding scale. You know, we've made many, many low-cost options available to people on fixed

incomes, to our veterans.

And we highly support and recommend that.

And that is one of our tenets, as business owners, that we're able to offer reduced-price product to patients that need it.

And believe me, there's many ways that we can make that work in our business model, and I think that that's important.

The other part that I want to touch on is, this goes back to being able to actually use the dried flower, which is probably the most economic way to use the product at this point, in smokeable form.

We often hear: Oh, this is smoking. It's got to be bad.

Well, there are studies that are suggesting that it's not. And vaporizing isn't always an option. It's more of a -- it can be much more expensive, as far as buying the oils and the actual device to vaporize products.

So, by offering a range of product, you're able to offer a range of prices.

But, also, by having responsible business owners at the table, as part of their business plan, showing how they're going to be able to offer

low- and reduced-cost medicine to patients that need it, I think that that's another critical part of how we, potentially, help choose business owners that are going to be potential licensees in this market.

And then just to circle back around, we are finding that patients that are using medical marijuana aren't having to use their prescription drugs, which often much, much more than medical marijuana costs.

SENATOR HASSELL-THOMPSON: Well, you know, I appreciate that, but, you know, there's a difference between "available" and "accessible."

And when we talk about treatment being available, that's one set of dynamics.

But, I would like to hope that, in New York, we would adopt the model that you are describing, to ensure that, through a sliding scale, through many of the programmatic designs that you named, that we will continue to make it, not only available, but accessible, because that's a major concern for me.

MEG SANDERS: It is, and I completely agree with you.

And I might suggest, as part of the application process, that might be part of the questioning, as far as: How are you going to

provide medicine so that it's accessible?

SENATOR SAVINO: And I think that's a critical point that you raised, Senator.

One of the mistakes I think that was made in New Jersey is, when they adopted the medical-marijuana statute, adding in the length of time it took them to actually implement it, they put restrictions, by region, and they found, quickly, that they were not going to be able to meet the needs of the population.

So we have to be careful, as we do this, that we don't put those limits.

There should be limited licensing, though. We don't want them popping up everywhere, because then you can't control it.

But we -- you know, New York is a very big state with a huge diversity in population.

We need to make sure that product is accessible, and also affordable, for the patients that are going to need.

MEG SANDERS: I completely agree with you.

One other thing that I would add is, the other importance of that is making sure that, when you are selecting registered organizations to grow this product, that they have significant experience

in the industry.

It is a unique plant. It's not like growing a tomato. And growing indoors is a very challenging environment to do this.

And, so, the experience helps ensure a steady supply, which ultimately translates into stabilization of price.

SENATOR SAVINO: Thank you.

SENATOR HASSELL-THOMPSON: Thank you.

MEG SANDERS: Thank you.

SENATOR SAVINO: Next we're going to hear from Jason Pinsky from the cannabis industry.

[Applause.]

JASON PINSKY: Good afternoon.

SENATOR SAVINO: Good afternoon.

Is it afternoon already?

No, it's still morning; five to twelve.

JASON PINSKY: Good morning.

SENATOR SAVINO: It's afternoon somewhere in the world.

JASON PINSKY: My name is Jason Pinsky. My primary background is in technology.

I've been a cannabis consultant in medically legal states and abroad since 1998.

I've recently come on board as CTO for

United Cannabis Corp.

I've been a New York State resident most of my life, and currently reside in Brooklyn.

I've also been a cannabis user, enthusiast, and activist for over two decades, with a focus on botanical extraction, sciences, and technology.

United Cannabis Corp. was founded to provide leadership for the medical-cannabis industry by offering patient-driven solutions.

Since 2009, our founders have successfully served over 15,000 patients per year, and currently cultivate hundreds of medical-grade cannabis strains, including more than 15 unique CBD-dominant varieties.

Our proprietary, full spectrum cannabinoid program, Act Now, currently manages over 200 sponsored patients suffering from chronic pain, drug abuse, inflammation, glaucoma, PTSD, neuropathy, multiple sclerosis, fibromyalgia, Chron's disease, seizures, epilepsy, paralysis, autoimmune, autism, tumors, HIV/AIDS, and many types of cancers, as well.

While we support CBD-rich medicine, we do not support CBD-only legislation.

The endogenous cannabinoid system, named

after the plant that led to its discoveries, is perhaps the most important physiologic system involved in establishing and maintaining human health.

Endocannabinoids and their receptors are found throughout the body and in the brain, organs, connective tissues, glands, and immune cells.

In each cell and all tissues, the endocannabinoid system performs different tasks, but the goal is always the same: homoeostasis; the maintenance of a stable internal environment, despite fluctuations in the external environment.

Cannabis sativa, indica, ruderalis, and hemp cultivars have been on our planet for over 35 million years. These plant species were one of the first four plants on earth to reproduce via airborne pollination methods.

As these plants spread throughout the globe, they developed different compounds, including cannabinoids, terpenoids, flavonoids, et cetera.

Cannabis sativa and cannabis indica created over 800 landraces in this process and developed a full spectrum of cannabinoids.

The genetic code for hemp and ruderalis focused on survival traits and lacked the full range

of compounds in cannabinoids compared to indica and sativa.

Utilizing all of the chemical compounds in cannabis secures the greatest probability of success in medical research and application, which is why we favor full-spectrum cannabinoid therapies over CBD-only alternatives.

The Act Now program is a comprehensive, full-spectrum cannabinoid-therapy program that utilizes the entire cannabis plant, controlling specific cannabinoid ratios, accurate dosing, and multiple delivery methods.

The Act Now program is designed to help patients manage their pain, appetite, sleep, inflammatory conditions, neuropathic dysregulation, mood, digestive disorders, and improve their overall cognitive function.

This full-spectrum cannabinoid program was helped -- was designed to help restore the communication pathways in the central nervous system, immune system, and correct deficiencies within the endocannabinoid system.

Our research partners, Dr. Brent Reynolds and Dr. Dennis Stenler [ph.], have concurred with our findings that CBD-only therapies restrict the

plant's full potential and limits the medicinal properties offered by cannabis.

We have documented hundreds of case studies with before and after results which prove that full-spectrum cannabinoid therapies are able to reach a wider bandwidth of patient conditions.

The Act Now program was able to help Karen reach a complete remission stage within 120 days. Karen was diagnosed with metastatic cancer, with tumors in the breast, bone, and liver.

The Act Now program helped Chrissy [ph.], a parent and nurse, manage her 11-year-old daughter's conditions, including autism, a constant state of seizures, epilepsy, closed spinal bifida, and severe hip dysplasia.

The Act Now program was able to help this 11-year-old girl reduce her meds down to only one pill.

In addition, the program improved her cognitive-function test results by 200 percent, reduced her seizures by 99 percent, controlled her autism, reduced her paralysis by 80 to 90 percent.

This was accomplished within five months of utilizing the full spectrum of cannabinoids used in the Act Now program, and might not have been

possible if she was restricted to CBD-only medication.

The Endocannabinoid Research Group is a multidisciplinary research group established in 1995, and based in the laboratories of several institutes and the Italian National Research Council, and universities of Naples and Salerno area.

The subjects of the scientific research carried out by this group are endocannabinoids.

Raphael Mechoulam is an Israeli professor of medicinal chemistry and natural products at the Hebrew University of Jerusalem in Israel.

Professor Mechoulam is best known for his work in the isolation structure, elucidation, and total synthesis of delta-9-tetrahydrocannabinol, the main active principal of cannabis, and for the isolation and identification of the endogenous cannabinoids, an anandamide from the brain, and 2-AG from peripheral organs.

These two works of research have merely opened our minds to the endless possibilities of full-spectrum cannabinoid therapies.

Accepted delivery methods include inhalation, digestion, sublingual, and transdermal applications.

Inhalation is a fast-acting delivery method, allowing controlled doses of cannabinoids to enter the bloodstream within 15 minutes, and has already been proven to decrease Chron's disease by 52 percent.

The endocannabinoid system is also located in our digestive system, and the receptors located in our peripheral organs require interaction to stimulate the corresponding receptors in our brain.

Sublingual, the platform for GW Pharmaceuticals, offers the fastest delivery method into the bloodstream to help manage pain.

In 2014, our product-development team has developed proprietary isolation techniques for accurately-dosed transdermal delivery methods via our skin.

The combination of these delivery methods, and others in development, help in standardizing the delivery of full-spectrum cannabinoid therapies.

Just a little bit about us:

Our president and board chairman is Ernest Blackman. He's' a horticulturalist and entrepreneur with over 20 years of experience, including 5 years in the commercial cannabis industry.

Mr. Blackman is currently an owner and master grower at River Rock, Colorado, and is responsible for the production, processing, workflow management, just-in-time inventory control, security staff, and training and recruiting.

Blackman has developed a proprietary grow method, based on an organic standard, to aid and stable chemical synthesis to limit side reactions that diminish yield.

Tony Verzura currently runs day-to-day operations of the Act Now program, patient-care programs, product development, accredited training protocols, QA, continued education, and oversees marketing efforts.

Mr. Verzura has also been featured on "CNBC"; "Money Talk"; "Washington Post"; and publications and culture magazine, "THC Magazine" and "High Times."

Our research, medical, and product-development team includes Brent Reynolds, Ph.D.

Dr. Reynolds received his Ph.D. in '94 from the University of Calgary, during which time he and Sam Weiss discovered the existence of a stem cell in the adult central nervous system, challenging the

centrial [ph.] dogma that the adult brain was unable to produce new neurons.

He co-founded NeuroSpheres, Limited, where he was vice president of research. And in 1999, published the first report on transdifferentiation of cells derived from one germ layer into functional cells of another germ layer.

Professor Reynolds holds 16 U.S. patents related to neuro stem cells, and his lab is currently focused on the development of stem cell-specific assays and manipulation of neuro stem cells, and understanding the role that solid-tissue cancer stem cells play in the tumor initiation in metastasis.

Dennis Stenler served as the executive director of the McKnight Grant Institute of the University of Florida, from 2004 to 2010, and is currently with Joseph Bangor Schantz [ph.], professor of medical research in the department of neurological surgery for the University of Florida College of Medicine.

The major research goal of Stenler's program was to develop stem-cell therapies for the treatment of debilitating neurological diseases.

He has wide interest in the use of stem cells

for cell-replacement therapies in human neurological disease; however, we've only begun to appreciate the cell and molecular biology of these cells which hold great promise for transplantation of other therapeutics.

Dr. Stenler's also using new molecular approaches to characterize novel developmental genes involving neurogenesis: cell survival and cell death.

The main strategy of these studies is to exploit well-known approaches for gaining access to signaling pathways that direct cell survival, proliferation, and fate determination.

As gene-expression profiles are refined, future approaches can rely on stem cells as vehicles for gene therapy in neurodegenerative disease.

Dr. Stenler is funded by grants from NIH.

He has also previously mentored graduate training.

[Unintelligible] Walton, Ph.D., is the senior scientist at the Estel's [ph.] Research of America located at the University of Chicago.

Last night, Sanjay Gupta aired Part 2 of his groundbreaking documentary on cannabis.

As more data comes to light, we're finally

seeing the mainstream media take a stance on utilizing full-spectrum cannabinoids for a wide array of conditions.

Gupta and Mechoulam refer to this as the "entourage effect."

Think of it like this:

There are more than 480 natural components found within the cannabis plant, of which 66 have been classified as cannabinoids; those chemicals unique to the plant, including delta-9-tetrahydrocannabinol. There are, however, many more, including CBG, CBC, CBD, CBDA, THC, THCA, CBN, CBDL, CBL, CBE, CBT, and other miscellaneous types.

Other constituents of the cannabis plant include amino acids, proteins, enzymes, sugars, hydrocarbons, acids, lactones, steroids, et cetera.

Mechoulam, along with our researchers, believe that all of the compounds of the cannabis plant exert a therapeutic effect more than any single compound alone.

While science has not shown the exact role or mechanism for all these various compounds, evidence is mounting that these compounds work better together than in isolation.

In closing, I want to thank you for your time, and encourage you to pass the Compassionate Care Act this session.

SENATOR SAVINO: Thank you, Jason.

We've been joined by Senator George Maziarz from Western New York.

[Applause.]

SENATOR SAVINO: I have one question, because you detailed quite a lot of research information there.

Has anybody from the New York State Department of Health reached out to you, or anybody else that's testified today in the industry, to talk to you about any of the research that you have available, how a medical-marijuana program would work?

JASON PINSKY: I have not been contacted, but I'm certainly available.

SENATOR SAVINO: Has anybody else who previously testified?

No?

Thank you.

Thank you.

JASON PINSKY: Okay. Thank you.

SENATOR SAVINO: We are going to shift back

to patients now.

We're going to have Dawn Carney from Mount Vernon, and Susanne Truesdale from Clifton Park.

Are you here?

Dawn and Susanne, are they here?

UNKNOWN SPEAKER: She'll be back.

UNKNOWN SPEAKER: They'll be back. They had to step out.

SENATOR SAVINO: All right, so I'm -- then I'm going to move forward to, we have a group of veterans.

UNKNOWN SPEAKER: Susanne is here.

SENATOR SAVINO: Oh, okay.

The veterans, come down, and you'll be next.

So, Susanne Truesdale from Clifton Park.

Thank you.

SUSANNE TRUESDALE: Good morning.

SENATOR SAVINO: Good morning.

SENATOR MAZIARZ: Good morning, Susanne.

SUSANNE TRUESDALE: [Microphone turned off.]

For over five years, I have faced cancer twice. I was first diagnosed in 2008, and then again in 2009.

SENATOR SAVINO: Excuse me, Susanne.

SENATOR MAZIARZ: Susanne, I don't think your mic is on.

Could you just hit that button there.

SENATOR SAVINO: Press the button.

SENATOR MAZIARZ: Is the red light on?

SUSANNE TRUESDALE: Yes, now it is.

SENATOR SAVINO: Okay.

SENATOR MAZIARZ: There it is.

SUSANNE TRUESDALE: I'm Susanne Truesdale, and I live in Clifton Park.

In 2008 I had a cancer diagnosis, and it returned in 2010. It was in my lymph nodes and it was a very serious illness.

And through -- over two years of time post that diagnosis, I suffered greatly. I had many, many issues as a result of radical surgery, radiation treatment, and chemotherapy treatments.

I developed over a two-year period many new conditions, illnesses that I now had to manage, and I was prescribed over a dozen different pharmaceuticals which did not work for me. They were ineffective, and they created further issues, where my doctors wanted to prescribe additional medications to manage the side effects of the initial medications.

I had numerous issues, including an emergency surgery -- actually, two emergency surgeries, unexplained fevers, and hospitalizations, and tremendous pain.

As a result of my radiation treatment, a year later, I developed bilateral sacral fractures. Basically, my sacrum was fractured.

And, the radiation treatment continues to work for many months, and so it was a year later after I had completed my radiation treatment that I had sacral fractures.

And the treatments also weakened my bones, and so at a very young age, I was diagnose osteoporoses. And, I actually did have a rib fracture that was very painful. And I was prescribed very strong medications, hydrocodone.

And, you know, looking back on all of the symptoms and suffering that I endured over two years, I can't believe that, with all the medications I could obtain, I could not obtain, legally, medical cannabis. And I think that is a downright shame.

We all know people who have had cancer.

I read a statistic the other day, 1 out of 4 people will be diagnosed in their lifetime.

So, no one is immune from illness, period.

And I support medical cannabis for a variety of medical conditions, including cancer.

That's just my personal story, so that's why I'm here today.

I thank you for co-sponsoring the New York Compassionate Care Act, and I ask for immediate vote, and passing this important legislation, so that no more New Yorkers will suffer.

Thank you.

[Applause.]

SENATOR SAVINO: Thank you, Susanne.

SENATOR SAVINO: Next, we're going to move on to, we have a group of young veterans:

Amy Reising, Leon --

LEO FEIT: Leo.

SENATOR SAVINO: Leo?

-- Leo Feit.

So who -- I have on my list, four.

So tell me who's here.

Amy?

AMY REISING: [Microphone turned off.]

Amy, Kunle, and Leo.

There was a typo. They're my advocates [unintelligible].

My name is Amy Reising, and I'm a Global War on Terror vet.

[Microphone turned on.]

My background:

I was a lobbyist for the Boeing Corporation, and I left in 2010 to pursue veterans legislation when I was denied VA care, because I made too much money under the Bush Statutes.

In Delaware in 2010, I got posttraumatic stress put back on the bill.

And I thank you for co-authoring this bill, and using the Delaware legislative piece. That is actually my piece.

So I started Veterans for Alternative Care here in New York State, out of Ithaca/New York City. And, we have an awesome studio and garden where we do a lot of occupational therapy and transformational healing from our war wounds.

And I am here today to talk about posttraumatic stress, traumatic brain injury, and limb loss due to action, for -- obviously, for cannabis, and how cannabis can help.

And I was paying attention earlier when we were talking about CBD-only legislation.

And I know that there have been some concerns

in New York State about CBD-only.

And I think, also, like others have mentioned, it's a very wrong move to have a CBD-only state or -- and -- to Senator Ball's statements about inhaling, and being concerned about smoking, I think, you know, for people with limb loss, especially CBD ointments and different tinctures are very helpful for them.

And I think that, for us, as veterans, so many veterans are getting addicted, like you said, to opiates and different pharmaceutical drugs.

And here we have our endocannabinoid system.

And when you have posttraumatic stress or you go through an extremely situation, your body stops producing, or doesn't produce as much, anandamide, which is the chemical your brain makes that binds your free endocannabinoids in your -- or, your cannabinoids in your endocannabinoid system to your CB1 receptors.

And for somebody like me, you know, I might only be at 30 percent, where you might be at 100 percent; and, so, THC is actually the better drug when it comes to your brain and function, instead of CBD, and something like that.

So, like, for posttraumatic stress, you need

a better THC strain than a CBD.

And that's also, like, you know, something that we talked about, and it's very disconcerting, for a number of reasons, that people aren't really taking veterans issues, and looking at cannabis as a veterans issue, because these pharmaceutical companies have multimillion-, sometimes billion-dollar contracts, you know, with the government.

And, for us, we have an opportunity, as veterans, to come home and have some transformational healing in gardens, and be able to grow our own medicine, and have 100 percent -- a 360 program, if you will, where veterans can run their own grow operation, and, you know, 100 percent organic, everything else.

And then you could have transformational healing, putting back, like, all of the trim or whatever is left over of the plant matter, you can turn it back into paper and make art of it.

And that's kind of what we do in Ithaca. You know, we cut up combat uniforms and make paper, and make new pieces of art out of acts of war.

And, so, that's something that we would definitely love to do, is, like, add

food-and-medicine forests to our garden, essentially, out there, and be able to be 100 percent veteran-owned and -run, and everything else.

Because what happens for us is, a lot of these VAs, they've started putting their own wings for Operation Iraqi Freedom, Operation Enduring Freedom, and Dawn veterans, because -- especially women, because we have experienced such traumatic instances. And going in public, and especially going to the VA, is very, very daunting.

And, for us, I know, like, the VA is not going to want to handle cannabis.

And most people don't know that the VAs already backdoor legalized cannabis through the federal government.

The VA issued an edict in 2010 that said every patient who is getting care in a legal state could still get care if they tested positive for cannabis, because, up until then, up until 2010, if you tested positive for cannabis in your drug test, they would deny you care.

And I'm a mother of a 6-year-old child. I'm a single mother. For me, I can't go home and take narcotics, because I still have my son to contend

with.

And a lot of people haven't really thought about single mothers and -- as being veterans, and what that means for us, because, you know, are we afraid to lose our children? Absolutely.

I've watched three personal, close friends of mine get their children taken away from them due to posttraumatic stress.

And this -- like -- especially, like, if you give me a narcotic that is given to me by the government, I can go home with that, legally.

But I still -- really, it's hard for anybody to be under a narcotic and care for a child.

However, you know, it's illegal for me to give myself care, and be able to care for my son.

And I feel like, for us, you know, in order to stop the war, you know, essentially, we need to stop the war, but we need to stop the War on Drugs and the war on soldiers at home, because I'm fighting this whole other war for care, when I've already fought a war.

SENATOR SAVINO: Thank you.

You raised an important point, and I'm glad you did, because I was going to ask about it.

Since many veterans receive their medical

care from the Veterans Administration, which is a federally-run health-care delivery system, what happens if you are in a state that has medical marijuana, and you go to the VA, do they deny you treatment?

AMY REISING: See, if they were denying -- they were denying treatment to vets even after the 2010 edict. But in the last year and a half, we've taken three states to court. Most recently was Florida.

We testified to a Florida grand jury, we also testified to an Arkansas grand jury, because, you know, soldiers were being denied care in right-to-use states. And, you know, obviously, the only recourse is legal.

So, that's completely how we've taken on this task.

And, moving forward, the government has to give veterans care at the VA level, as well as, like, receiving cannabis.

So, if New York -- like, for instance, if New York State becomes a legal state, then the VA has to administer care regardless, because of the 2010 edict. And if not, you know, obviously, you take them to court.

SENATOR SAVINO: What's the traditional treatment plan for posttraumatic stress?

What is the traditional --

AMY REISING: Psychotropics. And there's, like, a myriad. It's a Molotov cocktail.

And for us, personally, I know one person who has overdosed on their medication. He died in 20 -- right after -- yeah, in December of 2011, he passed.

And that's just, like, one small instance.

You know, like, New York State has one of the highest veteran suicide rates, as well as active-duty suicide rates, in the country. And I don't think people are taking that into consideration.

And, also, New York State, because of the Mountain Division at Fort Drum, you know, we have these guys going on "the gauntlet," they call it; those back-to-back tours. It's five tours, and then you're done, for good.

But, a lot of them come home maimed. And we have a huge population of limb-loss, like -- limb-loss survivors here in New York State that could benefit from this bill; although, limb loss and TBI haven't been articulated on it yet.

SENATOR SAVINO: Thank you.

Do you have any questions, Senator Maziarz?

SENATOR MAZIARZ: No.

SENATOR SAVINO: Senator Valesky?

SENATOR VALESKY: No.

SENATOR SAVINO: Thank you.

SENATOR MAZIARZ: Thank you.

Thank you for your service.

[Applause.]

SENATOR SAVINO: Next we are going to hear -- Am I on?

I'm on.

Next we're going to hear from some parents who brought -- come here with their children:

Kate Hintz, Missy Miller, and Polly Vander Woude [ph.].

[Applause.]

SENATOR SAVINO: We only have the room until 1:00.

SENATOR MAZIARZ: At 1:00, they're going to turn the heat on, so, we have to leave.

[Laughter.]

SENATOR SAVINO: Can we do something about that? It's freezing in here.

MISSY MILLER: Hi, I'm actually -- I'm Missy Miller. I'm going to go first because I have

another meeting. Sorry.

Hi, I'm Missy Miller. I live in Atlantic Beach, New York.

I'm here today because I am urging whoever is still not supporting this Compassionate Care Act to please pass this.

I have a son named Oliver, who's sitting right over there, and he is the reason that this is so important to me.

Oliver had a stroke in utero, and as a result, he has a devastating brain injury. This brain injury has resulted in many medical complexities, among them, a severe seizure disorder that has not responded to any pharmaceuticals or traditional treatments.

He has endured many overwhelming illnesses, hospitalizations, and setbacks in his young life.

He has struggled to overcome and emerge from odds that were stacked against him.

Imagine trying to think, trying to focus on something, trying to sit up or stand, while there is an almost constant burst of seizure activity going on in your brain.

He has had to fight all his life, often in a haze of drugs used to try and control these

seizures.

When not in a postictal or drugged-up state, Oliver is very funny and silly and happy. He is loving and affectionate and accepting of everyone that he meets.

In his world, there is no such thing as judgment or negativity. His world is full of dedicated loving family and friends who believe in him. He is the bravest, happiest person I know.

But, we are losing him, day by day, seizure by seizure.

Each seizure causes anxiety.

I worry, which is the seizure that has the potential to take him from us?

Will this be the one that starts the cluster of status seizures that do not stop?

Oliver has lost milestones in the past few years. He's lost skills because of these constant seizures.

After years of struggling and fighting to be able to pull himself up to stand, he can no longer do this. Even sitting has become hard for him. He often gets slammed down by drop seizures.

Just this past weekend, he had a seizure while in the bath tub and slammed his head. It took

myself and my 19-year-old daughter to try and keep his convulsing body away from the sides of the tub and to just keep his head above the water.

None of the medications, surgeries, or treatments that we have tried have helped.

He is 14, and he is addicted to FDA-approved and doctor-prescribed benzodiazepines and barbiturates that don't work.

There is a strain of medical marijuana that can help him, which we all know about, but we can't have access to it because it's not legal here in New York yet, and the Governor's very limited pilot program will not provide the help that my son needs.

Passing the Compassionate Care Act in New York will allow us to use this medical marijuana to stop Oliver's seizures. It may very well save his life.

Please look at my innocent child suffering needlessly, and be the one that decides to make a difference.

This should be a medical decision, not a political one.

My son's doctors are fully in agreement that he should be allowed access to medical marijuana.

Why does any politician have the power to

stand in the way of that?

Oliver doesn't have the time to wait for this to be held up any longer.

[Applause.]

SENATOR SAVINO: Thank you.

SENATOR MAZIARZ: We may have questions, so why don't you stay.

If you don't mind. I mean, if you have to go back, go.

MISSY MILLER: I have an appointment.

SENATOR MAZIARZ: Okay.

SENATOR SAVINO: Are you going to lobby a member? More important, go convince them.

KATE HINTZ: Hi, my name is Kate Hintz. I'm from North Salem, New York.

I'm here today with my daughter Morgan, and her nurse Carol.

I have to apologize in advance, as I'm very emotional today, having, last night, just watched that CNN documentary. It featured so many families that are just like mine.

I'm heavily burdened with the choice my husband and I have made.

We have decided not to move and not to relocate. We have decided not to obtain medical

cannabis or attempt to obtain it illegally.

Instead, we have decided to stay and make every effort to raise awareness about this remarkable plant, and to fight to get this bill passed here in New York.

We are taxpayers, we are homeowners. We participate in government, we participate in our community.

We have the absolute luxury to provide Morgan with the best medical care available.

If we are not happy with a hospital, we switch hospitals.

If we are not happy with our doctor, we seek a second opinion.

Now, I'm aware that this is not the case for most residents of New York, but the reason I mention it is because, even with this luxury of choice and option for Morgan's health care, it has failed to be enough for her.

At only 9 weeks old, Morgan experienced her first seizure. Luckily, we do live in one of the best areas to receive state-of-the-art pediatric care.

We headed straight to the hospital and hoped for the best.

Morgan had seizure after seizure. Days turns into weeks, and then into months. We tried drug after drug, and nothing helped.

Finally, after numerous tests, we got a diagnosis. Morgan has Dravet syndrome.

Dravet syndrome is a rare and catastrophic form of epilepsy for which there is no cure.

Part of the reason why Dravet syndrome is such an ominous diagnosis is because it is highly resistant to medications, and usually requires a cocktail of at least two to four separate medications for any hope of seizure control.

I am not embellishing when I say that doctors have tried almost every medication and treatment available.

In her short 3-year life, Morgan has been prescribed over 10 different medications in an attempt to control her seizures. These include phenobarbital, Keppra, Trileptal, Lamictal, Depakote, Klonopin, Topamax, chloral hydrate, as well as high dose of steroids.

Many of these are classified as narcotics and are highly addictive, with endless side effects.

None of these medications are FDA-approved for use in infants or young children, and, none of

these medications have worked.

The list of side effects is staggering.

Now at 3 years old, Morgan depends on a feeding tube because she cannot eat by mouth. She cannot sit or stand independently. She does not speak. She cannot pick up a toy.

Even worse, she has been diagnosed with kidney stones at only 16 months old.

At 20 months old, she was diagnosed with ulcerative colitis.

And earlier this year, we noticed strange physical changes happening to her body, and were told that she has begun precocious, or early puberty.

The line between side effects from medications and her actual diagnosis is completely blurred. We have no clue what is a result of medications and what is a result of her diagnosis.

She requires a nursing level of care as defined by New York State. She takes a cocktail of 11 medications and supplements 3 times a day; yet, at her best, Morgan has only gone 4 weeks seizure-free.

Each seizure causes more and more damage to her brain, her heart, and her body.

Two weeks ago, Morgan experienced her first full-body convulsive tonic-clonic seizure lasting approximately 5 minutes.

Just when we think things cannot get any worse, they continue to do so.

For the most part, Morgan does not leave our home. All services are provided to her by the wonderful State of New York, including numerous therapies via early intervention, and private nursing via a care-at-home medical waiver.

Even with this care in place, I would equate her quality of life to that of someone living in palliative or hospice care.

This is no way for a 3-year-old to live.

Waiting for an inevitable seizure to occur puts a heavy burden on myself, my husband, and I regret to say we are no longer the once vibrant New Yorkers we used to be.

My reason for being here today is simple:

We have come too far this year for this bill not to pass.

I cannot continue to watch my child suffer. I'm tired of bearing my personal emotional struggles to people who refuse to educate themselves; instead, applying blanket rationalizations about substance

abuse and smoking.

This does not apply to suffering New Yorkers with medical conditions.

Some Senators have told myself and other mothers here today that they support my daughter, and would do anything to help them; yet, they will not support this bill.

These two statements simply cannot co-exist.

If you support our kids and you care about the sick people in New York, you must support the Compassionate Care Act.

It is time for our government to do the right thing: to step forward, and to get this bill passed.

Thank you.

[Applause.]

POLLY VANDERWOUDE: Hello.

Senator Savino, and other Senators, thank you so much for the opportunity to be here today.

My name is Polly VanderWoude. I live in Larchmont, New York.

I'm here today with my 3 1/2-year-old daughter Olivia, and her nurse Andrea, in support of the Compassionate Care Act.

My daughter Olivia has something called "Aicardi syndrome." There are less than

1,000 diagnosed cases of this rare genetic disorder in the United States. It's something we had never heard of until it became the most life-changing two words in all of our lives.

At 2 months old, Olivia had her very first seizure. We weren't sure what it was at the time, but we knew enough to get to the hospital very quickly.

The next 24 hours were a blur of tests and doctors and lab work.

When we saw Olivia's brain MRI, you did not need an M.D. to know that something was very seriously wrong.

There were large gaps where brain tissue should have been. And she is completely missing her corpus callosum which connects the left and right sides of her body.

She -- we learned that her eyes had scarring on each retina and she would be visually impaired, globally delayed, and likely suffer seizures every day.

Children with Aicardi syndrome have an average lifespan of 8 years old.

She is, and always will be, dependent on us and other caregivers to perform even the most basic

daily tasks.

In other words, we were in the midst of every parent's worst nightmare.

In the early days of the diagnosis, such as Aicardi, your grief and agony over the loss of the child you hoped to have balances out with hope in modern medicine, that there will would be some medication readily available to treat the God-awful seizures that will not stop, and, somehow, your child will end up on the higher-functioning scale of a spectrum diagnosis.

I write about Olivia -- my experiences with Olivia on a blog, and one of my early posts was around Christmas, her first Christmas, in 2010.

I wrote that our greatest wish for Olivia was to smile.

"Praying for smiles" became a common catchphrase amongst our friends and family.

I believed it was only around the corner, that something expected of a 6-week-old would be within my daughter's cognitive and physical capabilities; however, seizures and seizure medications have stolen our daughter's personality and development from us.

At the time when most parents experience this

precious first, we were applying our baby girl with the best medicine science had to offer.

In her short life, we have tried 10 mind-numbing medications, a restrictive medical diet, and she has an implanted electronic pacemaker for the brain, a vagus nerve stimulator.

Even still, the seizures have been relentless.

Since she was diagnosed at 2 months old, she has had no more than 14 days without a seizure, not consecutive.

It's heartbreaking and shocking to me to even say that.

Currently, she's having 3 to 5 clusters of seizures every day, and they last anywhere from 5 to 15-plus minutes. It amounts to approximately an hour or more of seizures every day.

In addition, the numerous medications that she has tried come with the debilitating side effects that have negatively impacted her health. These include risk of permanent vision loss, permanent liver damage, decreased muscle tone, increased risk of breathing abnormalities, and sleep apnea.

Olivia now takes medication because she

cannot swallow her own saliva. She's lost the ability to eat by mouth, and is 100 percent fed via a G-tube directly into her stomach.

Last year, she was admitted to the hospital 14 times because her body was too weak to fight off the common cold.

We are realistic enough to know, that while we can't change her underlying brain structure and the limitations that puts on her abilities, but we believe very strongly that a life free from the daily toll of seizures could and should be possible.

This would be a huge improvement in Olivia's quality of life, and we believe that that would open up the possibility for more development.

Early on, my husband and I said, that helping Olivia realize her full potential and giving her the best life we could would be our goal.

Ironically, to do this, we moved to the state of New York in 2012. We were living in Chicago at the time, far away from family, and we wanted to be closer to our family.

It was very important to us to be able to be in driving distance of cousins and relatives, to take her on vacations, because flying with her, frankly, is extremely difficult.

So we chose New York as our home state because of the awesome services that the State offers to people like my daughter.

The quality of her life has improved tremendously while being here.

She's around people she loves.

We have nursing services and support that we would never have gotten in the state of Illinois.

She goes to an amazing special-needs school that she loves. It's the joy in her life.

And, we are in the process -- we bought a home, and we are in the process of remodeling it right now to make it fully handicapped-accessible for her.

I cannot explain to you the guilt I feel because I cannot physically go through another move. I can't take her to Colorado.

I've spent the last year and a half rearranging our whole life: the doctors, the therapists, all of the services, are carefully put in place and thought out.

Olivia's doctor does support this. She would, if available, work in concert with us to give her medical marijuana. She would love to see what that would do for our daughter.

Like other parents here today, I've been in contact with families with the exact same diagnosis as my daughter. They're in legal states and this is working for them.

You know, through their bravery, and pioneering this novel treatment for epilepsy, it gives me hope, that I have not had in a very long time, that this will offer Olivia some improvement.

And while I come here today advocating for Olivia, I also come here today advocating for all the families touched by epilepsy, and especially those children who have yet to have their first seizure; the child whose epilepsy diagnosis awaits them and their families.

Today, medical marijuana is being sought as a treatment of last resort; however, in the near future, I hope the promise of medical marijuana for epilepsy is realized and it can be started much earlier in that child's diagnosis.

These children will not have to cycle through the countless medications to get freedom from seizures, and their parents and families will have the joy of never wondering what would their child be like if it were not for the damage the seizures caused to their child's developing brain.

New York is, at its core, a progressive state on so many issues.

It's time for the Senate to listen to its constituents and bring the Compassionate Care Act to the floor to vote.

Children like Olivia do not have time for politics. They are counting on you and your fellow Senators to hear us here today, and take the necessary action to bring this medical therapy to a reality as quickly as possible.

My hope is that Olivia can enjoy more than two weeks of her life free from devastating impact of seizures, and I still hope and pray for smiles for my daughter.

Thank you.

[Applause.]

Kathy Bent.

KATHY ANABO [ph.]: I first have to apologize, because it was warm yesterday, so in Syracuse, and my allergies kicked in.

So, I am so sorry.

Since we've been here, we've had three seizures. And I say "we" because it is a family affair. It takes mothers and fathers and caregivers to wave the magnet, as Kaylee [ph.] has

VNS, or whatever needs to be done to care for children.

So with that said:

My name is really Kathy Anabo [ph.]. I am a devoted mother, loving to four beautiful children.

Kaylee, now 11, is the reason that I am here today.

She, too, is born with Aicardi, so, you have two of us sitting right here.

Anyway, I could have never imagined that such exhilaration could have so quickly turned into heart-wrenching pain. We would soon learn that Aicardi is a rare neurological disorder, with approximately 900 cases reported in the United States.

It is a defect on the X chromosome, and has, thus far, have been observed in females with, the exception of males who have Klinefelter syndrome.

It involves a severe seizure disorder, brain anomalies, abnormalities of the eyes, and many other health-related conditions.

As I struggle with my words, and as I struggle to find the right words, I do know that what I can tell you, and that what has ruled our life over the last 11 years, controlled our days,

taken away Kaylee's growing years, and until now, had shattered any and all hope for a normal life: seizures.

"Seizures."

Allow me to share Kaylee's story with you.

She was born on August 20, 2002. We welcomed a beautiful baby girl into our lives.

As the diagnosis quickly followed, we were told that Kaylee would not live past one.

As tears flowed down my face and I held her in my arms, I knew that there was nothing wrong with her and that everything was right.

You see, Kaylee is our angel, she was sent from heaven. Her soul is perfect.

As we questioned the many medical conditions that would soon arise, we did learn that Kaylee is on the severe side of the syndrome.

Characterized by the agenesis of the corpus callosum, Kaylee has complete absence, which means that the band of white matter connecting the two hemispheres in the brain have failed to develop.

She has intractable seizures that range in form, from generalized, to complex partial, and are a mix of heart-wrenching grand mal, myoclonic, tonic-clonic, atonic, and absence.

If that's not enough, she has Nissen fundoplication with a G-tube. She has a left-eye coloboma, total retinal lacunae, that is quite specific to the disorder. And morning glory syndrome, which is an optic-disc cortex anomaly.

Many doctor appointments brought many more disappointments.

Drug after drug, month after month, risking one bad side effect for another, the only thing that remained constant were her seizures, and hundreds of them.

She regressed in all areas, along with her ability to sit, eat, laugh, and engage in her world. Walking and talking and any day-to-day task became far out of reach.

Like many moms and dads, I've watched thousands and thousands of her seizures.

I have felt electrical charges ravage through her tiny body. And as I hold her and tell her "It's going to be okay," in the end, I'm only left with, What can I do to help my child?

Until now, it all felt hopeless, like there were no answers.

I realized that, sometimes, by losing a battle, you find a new way to win a war.

Like so many, we have battled 20 to 30 seizure meds, homeopathic and holistic remedies, the ketogenic diet, the vagus nerve stimulator, cranial psychotherapies, and, of course, prayer.

Sad to say, in this battle no one wins, and it's only a matter of time before seizure could take her life.

As elected officials, you are all in positions to serve.

I thank you for the many endeavors you endure on a daily basis, the tough decisions that you make, and, at oftentimes, the very thankless task that you complete.

I ask you to listen to one of the greatest needs that we have: it's the need to live.

As I quote Dr. Gupta: "We all need to be reminded that a true and productive scientific journey involves a willingness to let go of established notions and get to the truth."

Time is of the essence. We can't afford to wait another day, let alone another year.

We need the Compassionate Care Act now.

I don't want to waste my time or yours on the many medical uses of the cannabis plant, as I know you know; or the medical research that was performed

in the late nineteenth century, or the benefits to our medical, agricultural, textile, and industrial industries.

I do, however, want to remind you that access to effective medicine and quality health care are listed as fundamental rights in the United Nations Universal Declaration of Human Rights.

Medical use is specifically allowed by the single convention treaty.

It is cruel to deny sick and dying people this effective medicine, and inhumane to punish patients whose very quality of life depends on access to cannabis.

With that said, right here, right now, Americans across -- or, I'm sorry -- patients across America are still victims of government law-enforcement officials who are practicing medicine without a license.

A recent article -- oh, I'm sorry. I don't want to talk about Charlotte's Web, because you guys already know about that.

Sorry.

There's a lot of misinformation and emotion on this issue; however, in the end, stories of promise have emerged.

This is a state filled with loving, caring parents who want what's best for their children.

Shouldn't they have the opportunity to decide if medical marijuana, specifically, Charlotte's Web, is the right choice for them?

If you were that mother or father, wouldn't you want every option available?

As you hold your seizing child, I strongly believe that you, too, would jump every puddle, hurdle every river, or sail every ocean, instead of wiping every tear that falls down your face, as you watch and hold helplessly your child, and pray that it's not going to be their last breath.

Thank you for the opportunity to be here today.

I trust and believe, as you continue your talks, meet with the people who have elected you into office, listen carefully to the many stories where hope is renewed, that you will do what is best for New York.

But I promise you that if our voices are heard today, your heart will rejoice, knowing, you may have saved one more child from a sudden epileptic death.

[Applause.]

SENATOR SAVINO: Thank you.

Next we're going to hear from Joe Fontana, the legislative director from UFCW Local 338, and, Ed Pichardo, on behalf of the Worker's Compensation Alliance.

[Applause.]

UNKNOWN SPEAKER: Before we start: Folks, we are running a little bit late on time. We have limited time for the room.

We definitely want to hear from everybody.

If you could maybe summarize your statements to as little as possible, I think that would help get us out of here reasonably timely.

Thanks.

SENATOR HASSELL-THOMPSON: And I just have one quick question.

Is Jake Schrader still here?

JAKE SCHRADER: Yes.

SENATOR HASSELL-THOMPSON: Oh, okay.

And, Jason Pinsky?

SENATOR SAVINO: No, he had to leave.

SENATOR HASSELL-THOMPSON: I wanted his speech, 'cause --

SENATOR SAVINO: We asked for a copy of the PowerPoint that he had.

SENATOR HASSELL-THOMPSON: Right, okay.

And I apologize, but I've got constituents who are up here on education, so they keep calling me outside to meet them, 'cause they came all the way by bus this morning.

And just to be -- to spread myself around, I had to jump out to talk with them for a few moments.

And then, in 10 minutes, I've got conference.

So, I want to try to hear as many of the speakers as I can, but know that part of the reason those of us who are here, are here to support this effort. And we just need to be well-educated and well-informed, because we're going to get the questions and you're not going to be here to answer them for us.

And so, when we debate, these are the kinds of questions and things that we anticipate that we will get on the floor.

So I just appreciate your indulgence with us.

Thank you.

JOSEPH FONTANA: Thank you, Senators.

My name is Joe Fontana. I'm the political director for Local 338, RWDSU.

The RWDSU is part of the UFCW. It's the

largest council of the UFCW. And our local represents over 19,000 members in the retail food industry, drug/pharmaceutical store industry, and other service industries in New York.

I'll try to shorten this up as best I can.

I'm just here to basically say: Local 338 proudly supports the Compassionate Care Act. We're proud to be part of this effort.

The Compassionate Care Act will, both, provide medical care for citizens in our state, but it will also provide a positive economic impact.

We've head about the benefits of medical marijuana, and the benefits really can't be argued, so I'm not going to get into that.

But this legislation will create a highly regulated industry that will create thousands of middle-class jobs across this region -- across all regions of our state. These jobs will involve production, transportation, retail sales, of medical marijuana.

Not only will this industry create thousands of jobs, but it will also provide state and local governments with millions of dollars in new tax revenue.

As we continue this year's budget

negotiations, I know you are aware of how important these funds can be to maintain and enhance the services offered across our state.

The UFCW, nationally, has organized over 4,000 medical-marijuana workers in the United States. These workers are well-paid, receive health benefits, and a pension benefit. They have the protections of collective-bargaining agreement.

New York has spent hundreds of millions of dollars to attract and retain businesses in our state; and the passage of this legislation will do just that.

I've had the opportunity travel to Colorado, and met with medical-marijuana workers who are members of the UFCW. These workers are no different than any other workers in production and retail facilities that we represent in traditional industries. They want a middle-class job that can provide them -- so that they can provide for themselves and their families.

Passage of this legislation will improve health care for patients and improve the quality of life for their families, while creating thousands of middle-class jobs; jobs that will allow people the lifestyle that New Yorkers deserve.

The new businesses that this legislation will create, the products that those businesses will produce, and the workers who are employed by them will, together, produce millions in local and state revenues.

It's time New York joins with 20 other states in legalizing medical marijuana.

I just summarized, you know, for the sake of time, but I did want to say, this is not just about jobs.

The priority for Local 338 is the patients.

I don't know, I know Senator Savino knew Steve Peznick [ph.], who was the predecessor in my job.

Steve passed away last year from pancreatic cancer. He was diagnosed, and within nine months he passed away. He went from 220 pounds, down to, I think he was 90 pounds when he passed.

And Steve -- you know, I remember Steve telling me, about halfway through the struggle, Steve said to me, he said: Joe, the biggest problem is, I can't keep my strength up, I can't eat.

And, you know, I wonder if, you know, Steve would still be fighting the fight if he was allowed to eat and had the energy, and he was able to fight

the battle from a stronger base, having the ability to eat.

And the one thing we know is, this medical marijuana will allow patients to go through their chemo treatments, and allows them to eat and keep up their strength.

And that's something, you know, that sticks with me, Steve saying that to me. And I'm just wondering how much that drug would have helped Steve.

So, thank you.

[Applause.]

EDWARD PICHARDO [ph.]: Good afternoon.

My name is Edward Pichardo. I'm here in place of my colleague Richard Winsten [ph.]

We're here on behalf of the Worker's Compensation Alliance. It's a statewide coalition that protects the rights of injured workers.

I'd simply just like to say that, the WCA supports the Compassionate Care Act, urges its passage, and its ultimate enactment.

Thank you.

SENATOR SAVINO: Thank you.

Short and sweet, thank you.

[Applause.]

SENATOR SAVINO: Do either of you have any questions?

SENATOR THOMPSON: No, just a comment.

It's good to see you again, Ed.

EDWARD PICHARDO [ph.]: Yeah, nice to see you, Senator.

SENATOR HASSELL-THOMPSON: We've worked together on legislation in the past, and so I trust all that experience will serve you well, in terms of helping us to frame what's -- you know, we've talked about the accessibility today, a little bit, to patients, but, we also want to be sure that workers receive appropriate accommodations in the workplace.

And how do you -- how do you define "middle-class jobs"?

You keep -- I keep hearing the term "middle-class jobs," as opposed to, what?

JOSEPH FONTANA: Well, you know, there's a trend in New York. You know, job creation, you know, starts with, you know, any job is considered job creation.

Well, we don't look at it like that.

You know, low-wage, minimum-wage, jobs are not middle-class jobs.

SENATOR HASSELL-THOMPSON: Okay, so you're --

JOSEPH FONTANA: And, I don't have a technical definition for you, but the truth is, the jobs that the UFCW is providing are jobs where folks are going to be able to afford a good living, provide a better future for their children, have pension benefits, have medical benefits.

And, you know, I can't put a dollar value to it, but it's nowhere near minimum-wage jobs.

SENATOR SAVINO: Thank you.

SENATOR HASSELL-THOMPSON: Thank you.

[Applause.]

SENATOR SAVINO: Next we are going to hear from Liz Dellureficio [ph.], Hillary Savoie [ph.], and the Russo family.

How do you say your last name?

LIZ DELLEREFICIO: Dellureficio.

SENATOR SAVINO: Dellureficio.

LIZ DELLEREFICIO: Yeah.

Thank you so much, Senator Savino, and --

SENATOR HASSELL-THOMPSON: And you're Italian?

LIZ DELLEREFICIO: My husband's Italian. I'm Jewish; Schwartz.

Thank you so much holding this, and allowing

us the possibility to speak.

I'm going to try to edit what I wrote.

I'm here to support my -- I'm here for my daughter who is 17, and her name is Nika [ph.]

She began to get epilepsy when she was 5 months old. And, she's is 17, she still has epilepsy. She can have as many as 800 seizures a day.

That means one part of her body or not is usually actively shaking. Those are the smaller seizures.

She remains aware, and smiling and happy and interactive while she's having these smaller seizures that are not under any kind of control.

One time a week she has a large grand-mal seizure, also known as a tonic-clonic, where her whole body will shake violently for about two minutes.

You wouldn't think that those two minutes would create such a havoc for her life, but, they do, because the recovery period from them, she needs to sleep the entire day afterwards, and misses school for the next two days. Takes it her three days to recover from a grand-mal seizure, and this happens week after week after week.

You know, you see around you that many families are in the same position, and we've all tried many medicines. She's been on so many. And she's on, you know, four right now.

She takes 25 pills of medicines a day.

She's a beautiful, wonderful person. She's very interactive. She uses an augmentative communicative device to speak, where she looks at it and it goes off, because the seizures stole her speaking.

So, we're hopeful for medical marijuana.

It comes in various forms. You've probably heard of Charlotte's Web. It has such a small amount of THC, so there's no high. It comes in an oil. You don't smoke it. And it's not a gateway drug because this is medical marijuana.

We are not for legal -- I am not for legalizing marijuana. This is medical marijuana for people who need it.

And this can -- this has been shown to stop seizures through the evidence of several hundred people who are in Colorado.

I don't want to have to be forced to move. I have job. I don't think I can replace my job.

And, I just want to sort of end by saying

that, the Epilepsy Foundation -- I want the quote the Epilepsy Foundation.

They support the rights of patients and families living with seizures and epilepsy to access physician-directed care, including medical marijuana.

Nothing should stand in the way of patients gaining access to potentially lifesaving treatment.

If a patient and their health-care professional feel that the potential benefits of medical marijuana for uncontrolled epilepsy outweigh the risks, then families need to have that legal option now, not in 5 years or 10 years.

For people living with severe, uncontrolled epilepsy, time is not on their side.

SENATOR SAVINO: Thank you, Liz.

Hillary.

HILLARY SAVOIE [ph.]: Hi. Thank you very much for having me here today.

My name is Hillary Savoie. I am the mother of a really spectacularly lovely 3-year-old daughter who is adorable and funny.

She also has a long list of medical diagnoses, including severe hypertonia. She has failure to thrive. She's also fed with a G-tube,

like many of the children you've heard from today.

And, she has a diagnosis of a very rare form of intractable epilepsy known as "PCDH19 female-limited epilepsy." There are about 200 diagnosed cases in the world, currently, with this disorder.

It causes severe drug-resistant clustering seizures that have a tendency to be resistant to drugs. And if they are reactive to drugs, eventually, to stop being reactive to whatever drug treatment the child's on.

Ezmay [ph.] started having seizures at 10 months. At her worst, she had approximately 20 clear, obvious seizures in a day over a 24-hour period. She would have a week relief, and then she would be back to seizing again.

She also has a number of tiny, little seizures that we don't bother counting because they're probably in the thousands.

I'm not sure how many of you have seen someone have a seizure, especially a child, but I can tell you that I've seen thousands. And every time my child seizes, and she turns blue and she shakes, it doesn't get any easier no matter how many times you see it.

And I can tell you that I would do anything to make her seizures stop, and give her an option for a healthy and productive life.

Treatment of epilepsy is a little bit like a toolbox. There's a bunch of drugs and they throw them at you, and you hope.

You titrate the drug up, and you hope and you hope and you hope.

In Ezmay's case, she's had several drugs that didn't do anything to stop her seizures. She's had several drugs that made her violently ill.

She's very tiny, she's failure to thrive. And, one drug caused her to lose a pound in a week and a half. She was 17 pounds at the time.

They have turned her into a zombie.

They have taken my child away for periods of time. And some of them have worked, and then they've stopped working.

We're very fortunate right now. We're on a drug that has taken her seizures down to once a month, to once every three months sometimes.

Although, like Morgan's mom was saying, my daughter had her first tonic-clonic seizure about three weeks ago.

So the drugs are helping, but they're not

stopping all of the seizures.

And to give you an idea, the drug that she's on is a benzodiazepine. She's on a dose that is as high as we can possibly go for her age and weight.

To give you an idea of how high that is, I know other children who've been on this drug, who weigh 120 pounds, and weren't even half of her dose.

And it still doesn't control her seizures.

And, we also know that, all things considered, it's probably going to stop working at some point.

And I can tell you that, as a mom, I'm doing everything that I possibly can to help my daughter.

I am seeking the best medical care that I possibly can.

I'm willing to drive her three hours once a month to seek the best possible medical care that I can get for her.

I've started a foundation to raise money for research into her disorder, since it's drastically underfunded.

But I can't -- I can't legalize this option for her. Only you guys can do that.

And, you know, I've lived in New York State almost all of my life. I love this state. I own a

home. My husband has a fantastic job here. I brought him from abroad to live in our beautiful state.

I started my foundation here. I received my Ph.D. here.

I want to stay in New York, we want to stay in New York, my family is here. But, I will do anything that I need to do to keep my daughter safe.

And if that means that we have to go to another state to pursue all available options, we would.

And I'd really urge you to not put parents like us in that kind of a situation.

So, thank you.

SENATOR SAVINO: Thank you, Hillary.

Mr. Russo.

MIKE RUSSO: [Microphone turned off.]

Hi, my name is Mike Russo.

This is my wife, Felicia; my daughter, Antonella [ph.]; and this is my son, Anthony.

We've lived in New York State our whole lives.

Anthony, at 8 weeks old, started having seizures. We took him to the hospital, and we found out, through EGs, that he was having over a

thousand seizures a day.

We gave him several different medications, just like they went through, injections, and nothing's working.

We finally had one medication called "SABRIL" that is controlling his seizures right now, but the side effect of SABRIL is it can cause blindness.

But we still give to it him because it outweighs the damages that the seizures give him.

But it's going to come to a point where, the longer he uses it, the higher his chance of becoming blind from this.

And it just -- we've seen a line about the Colorado medical marijuana.

And as a child that has -- he has a gene defect that causes his seizures: the STXBP1 gene.

And there's a child that has the same rare disorder, that was probably is in worse shape than Anthony, and they started using the medical marijuana. And, the child now is starting to talk, using his hands, crawling.

Now, Anthony, right now, he can't walk, and they told us he's not going to talk.

But there is hope through this medical marijuana.

And, we're here for Anthony, to help him, but also for the future Anthonys, because the biggest thing is, to get the seizures under control as soon as you can, to stop the damage that it could create.

Thank you.

SENATOR SAVINO: Anthony is very chatty.

I have a feeling that if he gets access to treatment he'll be talking.

MIKE RUSSO: Yes, there's hope for Anthony.

Yes. Thank you.

SENATOR SAVINO: There's hope for all of your children. There really is.

Yes.

[Applause.]

SENATOR SAVINO: Thank you so much.

Do you guys have any questions?

No?

Thank you.

We're going to shift slightly again, to some medical professionals.

Lisa Kuprian [ph.], who is a registered nurse;

Arielle Gerard [ph.], who is a current medical student;

Then, Donna Schwier [ph.], who's also a

registered nurse, and a patient;

And Bishop Michael Clarke who's a faith leader and caregiver.

We are getting down to the end now.

Arielle?

ARIELLE GERARD [ph.]: Yes.

SENATOR SAVINO: Donna?

DONNA SCHWIER [ph.]: Yes.

SENATOR SAVINO: Is Lisa Kuprian here?

UNKNOWN SPEAKER: [Unintelligible].

SENATOR SAVINO: Okay.

What about Bishop Clarke?

No?

So it's just you two ladies.

DONNA SCHWIER [ph.]: [Microphone not working.]

Hello, and thank you, Senator Savino, for all your hard work.

And I want to thank the other Senators as well for being here.

My name is Donna Schwier. I live out on Long Island. I'm a registered nurse, and, I'm also a patient.

In 2010, I was diagnosed with fibromyalgia.

And, a lot of people aren't too sure what

that means, so I'm just going to talk a little bit about my symptoms, and such.

Fibromyalgia is basically characterized by chronic widespread pain throughout the body. There's trigger points.

SENATOR SAVINO: I think that one is out. It keeps going out.

DONNA SCHWIER [ph.]: Okay, we won't use that.

[Working microphone in use.]

DONNA SCHWIER [ph.]: Okay, so it's characterized mainly by chronic widespread pain throughout the body, above and below the waist, and on both sides of the body.

I can tell you that it's just a miserable condition.

I am on disability. I've lost my nursing career to it.

I go to pain management. I get injections in my back. And, also, I get prescribed Percocets, and I hate taking them.

When I smoke marijuana, it takes off the pain in a different -- completely different way. It relaxes me, relaxes my muscles. It improves my mood. It improves the quality of my life, because,

a lot of times, I can't do everything I need to do through the course of the day: Taking care of my apartment. It's hard to go get groceries, to do laundry, and things like that.

I think that education is very important for this bill. I think people need to really understand the science behind medical marijuana.

And I also think that if you're -- you know, if you're a senator, especially if you're a Senate leader, I think everyone should at least be interested and care about the science, and really learn and be educated about it in order to form an opinion.

And, you know, like, to heck with me. Just look at one child in here. "One child."

Do we really need another reason after looking at one child? I don't think so.

I used to care for children in similar situations, so, it hits me in so many different ways.

I'm in pain today, but, I come up to Albany a lot, because I think this is really important, and this bill needs to be passed this year. Not like last year. This needs to go forward.

People can't be moving out of the state,

risking the kids' lives, and, just, people need a better quality of life.

This bill really needs to go forward this year.

SENATOR SAVINO: Thank you, Donna.

DONNA SCHWIER [ph.]: Thank you so much.

SENATOR GRISANTI: Thanks, Donna.

[Applause.]

SENATOR SAVINO: Arielle.

ARIELLE GERARD: Hi, my name is Arielle Gerard. I'm a first-year medical student at Albany Medical College.

And just for the record, I speak today as an individual citizen, and not as a representative of Albany Medical Center or Albany Medical College.

I graduated from Albany High School, and I've been a New York resident for several years, so, I'm one of your voters.

As you all know, Governor Andrew Cuomo recently decided to allow the prescription of medical cannabis under the Olivieri Law of 1980, allowing for experimental use.

And while this is a positive step for patients, and increasing research is always important, access to be limited to thousands of

New Yorkers who could benefit from the use of medical cannabis.

Sorry, I'm trying to move around 'cause I know we're short for time.

More than 60 U.S. and international health organizations support the use of medical cannabis under the supervision of a physician.

Hundreds of doctors in New York support this legislation.

Medical cannabis is supported by 88 to 89 percent of New York voters, according to a recent Quinnipiac University Study, so, the support transcends bipartisan divisions.

Cannabis is shown, by multiple case studies and controlled scientific experiments, to alleviate the symptoms of many illnesses and disorders, many of which have been described today so I won't repeat those.

There's also some research that has shown that, in some cases, it might actually be able to be used to suppress tumor-cell formation, but more research needs to be done.

Cannabis has never resulted in death from overdose, unlike other commonly accepted medications, like codeine and morphine. It has a

very low risk for dependence.

While addiction to cannabis is possible, there is no way of distinguishing psychological versus physiological addiction, and you can be psychologically addicted to basically anything.

Cannabis is less addictive than nicotine, alcohol, and caffeine, which I think is a very important thing to note.

Withdrawal symptoms from physiological addiction to cannabis are also extremely mild, and involve fatigue and anxiety.

It's also important to remember that all medications do have side effects. And the health risks due to cannabis use are extremely minimal, and can be avoided by avoiding severe chronic use, and by using and researching alternative delivery options to smoking, such as oral and vaporization administration methods.

According to the Institute of Medicine's 1999 Medical Cannabis Report, except for the harms associated with smoking, the adverse effects of marijuana are within the range of effects tolerated for other medications, which is an extremely important point to note.

As was discussed earlier, I believe that one

of the -- a large issue that everyone's facing is worry that marijuana will lead to use of other drugs through the gateway theory.

And, the gateway theory has never actually been supported by science.

All research that has shown that it is supported are co-relational studies. And as many people learn in grade-school science classes, co-relation does not imply causation, which, again, is quite important.

Cognitive deficits with sensitive tests are noticed with chronic use of cannabis. But, again, these tests are extremely sensitive, and they might not actually be indicative of normal functioning.

And, there's no brain atrophy caused by use of cannabis if use begins in adulthood.

Oh, sorry.

In addition to the gateway-theory idea, the reason why people can become -- come into contact with other drugs is actually through use of underground networks, which is how many people are currently getting medical cannabis. And this increases their chances of coming into contact with other drugs, such as cocaine and heroin.

But, under this law, there will be a

regulation of the medicine, and we won't have to have this worry.

Current medications, such as dronabinol, also known as "Marinol," are currently insufficient. Dronabinol and Marinol are actually only THC, which is only one of the cannabinoids found in cannabis.

THC without other cannabinoids can be extremely anxiety-inducing.

Other cannabinoids, such as cannabidiol and cannabinol produce many of the health effects of cannabis, and these medicines are also felt -- the effects are felt much more slowly and dosage is very difficult to control.

As is explained, the full plant compound is necessary in order to attain the entourage effect which gives the full therapeutic benefit of cannabis.

Used in conjunction with other medications, it can actually prevent tolerance and addiction to other medications, as well.

Under regulation and supervision by a licensed medical professional, medical-cannabis prescriptions can decrease the pain and suffering of thousands of New Yorkers inexpensively and with minimal detrimental health impact, especially in

comparison to other common and accepted treatments.

This is a quality-of-life issue, and this a fight for the right to medicine.

It is a matter of compassion, patience, medicine, and science; not opinions, personal morals, taboo, or politics.

Thank you.

SENATOR SAVINO: Thank you, Arielle.

We're going to send you over to the Department of Health, and you can advise them. You probably have more information than they do on this subject right now.

[Laughter.]

ARIELLE GERARD [ph.]: Thank you.

SENATOR SAVINO: I'm not kidding about that, either.

[Laughter.]

SENATOR SAVINO: Our next, and final panel, are -- it's going to be a little bit of a mix.

Kira Coburn, Alexander Hardman, Dawn Carney.

And, then, when we get down to alternative methods of delivery, we're going to have Andrei Bogolubov, who's the executive vice president of PalliaTech.

So, if all of you can come down, we can get

everyone in, and we'll get out of here just a little late, but we started a little late.

So who do we have?

We have Dawn, Kira, and -- is Alexander --

DAWN CARNEY: No, he's not here with us today.

SENATOR SAVINO: Okay, then he's not here.

And then we have Andrei.

Are there any other patients or any other parents that wanted to speak?

No?

Okay, this is it then. See?

Go ahead, Dawn.

DAWN CARNEY: Good morning, Senator.

SENATOR SAVINO: Now it's afternoon.

DAWN CARNEY: Good afternoon.

Thank you for having us here today.

My name is Dawn Carney. I'm from Mount Vernon, New York. That's in Westchester County. And, I've been diagnosed with AIDS in 1992.

And, throughout those years, I call it a positive journey, but it hasn't been so positive, in a sense that, you know, with the medical and -- with the medication, actually, because, in the beginning,

we had to go through trial periods. You had to find out what, you know, fits you.

And -- but within that, you know, I went through a lot of, say, nausea, headaches, and -- and not wanting to live. I mean, I didn't know if I was going to be able to go through this for the rest of my life.

And then it got to the point, in 2004, and I started to suffer, you know, wasting syndrome. And that's when the AIDS, when it can no longer eat at the fatty tissue and start to eat at your muscles, and, you, pretty much, deteriorate.

And that's where I was at.

And like I said, I was giving up on life, and my mother said to me: Well, you know, there's others. Your family loves you. You're being very selfish.

And at that point, I was, like, you know what? Well, let me just give it another shot, you know, as far as with medication and...

So then the doctor still had to give me some -- the medical marijuana for me, for my appetite, to help me to eat. Because you still have to have food in your system, you know, with taking all these medications.

So I've done that. And I can actually say that I'm a 20-plus year survivor today. It's helped me to live.

And, within going through that, you know, I'm very well active, strong advocate in my community. Also a board member with Vocal New York. I sit on a [unintelligible] steering committee; I'm a voting member.

In other words, this has given me a life back.

And, I advocate on Compassionate Care Act, because there's many people in my community that's newly diagnosed with HIV and AIDS, and that may have to go through the same journey that they wouldn't necessarily have to, if we just passed the bill, the Compassionate Care Act.

So I strongly support the Compassionate Care Act.

And I hope that you will, and everyone else.

Thank you.

SENATOR SAVINO: Thank you, Dawn.

One question: You said your doctor helped you get --

DAWN CARNEY: I was on Marinol.

SENATOR SAVINO: Oh, Marinol.

DAWN CARNEY: Right.

And I heard the young lady before me, when she was speaking about, you know, the treatment of that. And, you know, because it doesn't work for everyone, you know.

It had an effect on me. It did help somewhat, but it's nothing like marijuana, you know.

And I have smoked it, and it has helped more so in helping with my appetite.

But, I would rather have it medically, as opposed to me going out in the street to get it.

And even today there's, sometimes, I still go through ups and downs with the appetite, and -- you know, but it's not as bad as it was.

So -- and, I'm doing much better.

Thank you.

SENATOR SAVINO: Thank you.

Thank God for that. Knock on wood.

Kira Coburn.

KIRA COBURN: Hi, I'm Kira Coburn. I'm 19, and I'm from -- I was born in Upstate New York. I've lived all over the state. And I currently live in Manhattan.

And I have a bunch of different conditions: neurological and autoimmune. And, also, one of the

most harder to treat ones that I have is called "reflex synthetic dystrophy."

And what it is, is a degenerative nerve disease that causes -- it causes different symptoms for different people, but, it causes, for me, chronic pain and muscle spasms and, like, atrophy to my legs.

And, I've had a lot of surgery. And, like, I've taken a lot of pain medication.

Like, even to this day, I'm 19 years old. I shouldn't have to be on, you know, all the morphine and stuff, just to be able to walk.

And when I was younger, when I was first diagnosed when I was a kid, I was -- it got bad to the point that I was in a wheelchair, and I was told that I was never going to be able to walk again.

And, so, that was -- you know, that was my life.

And -- but when I got a little older, I smoked pot for the first time, and I just stood up. Like, that is incredible.

Like, I was told I was never going to walk again. And, like, I'm standing.

And to this day, I know I'm using a cane, but, the fact that I'm even walking is beyond, like,

amazing, and miraculous. And it's due to the cannabis use.

And it's definitely -- it needs to be -- we need to have safe access, because even though I have -- you know, I access it and I get it, I would much rather be in a professional, you know, safe setting.

And especially when you're in pain management, you can't even, like, mention cannabis. You can't mention it, because then your whole treatment plan gets, like, eradicated, and you can't continue any of the treatment plan.

And it's just very important. It needs to be, you know -- we need to have safe access.

And it's -- thank you.

SENATOR SAVINO: You're absolutely right, we shouldn't have patients placing their liberty in jeopardy, as well as their health.

Absolutely right.

And, finally, Andrei Bogolub --

ANDREI BOGOLUBOV: Bogolubov.

SENATOR SAVINO: Thank you. Bogolubov.

Everybody has hard names today. I don't know what it is.

There has been a lot of talk about

alternative methods of dosing, and you have a product that's one of them.

So, if want to describe the PalliaTech method.

ANDREI BOGOLUBOV: Thank you to both of you, and to the other members of the Panel, for this, and for your leadership, Senator Savino.

I am with PalliaTech. We're a company based in Long Island, and we're working on advancing the science and practice of palliative care, particularly in cannabis delivery -- cannabis -- the delivery of cannabis therapies.

SENATOR SAVINO: Is that on?

ANDREI BOGOLUBOV: Yes.

SENATOR SAVINO: It is?

ANDREI BOGOLUBOV: We have -- I'll just sit closer. Sorry.

We have a medical device that we are building, that will deliver the whole dose in a metered form, single dose, smokelessly.

We think this is a very important aspect.

We support the legislation, but it's an important aspect that is missing and should be included in the legislation.

I have today the testimony of

Dr. Steven Paterno, the co-director of the Duke Cancer Center, who's on a number of our science advisory board.

I will cut this back dramatically, and get right to the point, and just read the relevant excerpts.

What Dr. Paterno says, in his field of cancer and pain management for cancer, that there's a lot of interest in adding medical cannabis to their symptom management [unintelligible].

In his view, the debate's on over whether there's efficacy.

The question is: How do you deliver that?

And his question is:

15 years after California first legalized medical use, most physicians, and almost all, we think all medical institutions, in California and other medical-cannabis states, cannot and will not recommend cannabis to most, if not all, of their patients who might benefit from the treatment.

And the question is: Why is that so?

First, under current conventional methods of administrations, doctors can go no further than certifying that a patient has a qualifying condition because they cannot deliver cannabis as a medicine

in a metered dose.

That's very important for doctors, for liability reasons, and, because that is how they're used to treating patients: to the dose-response curve.

So unable to do that, all they can do is suggest that their patients try cannabis and hope for the best.

And that certainly works for many people. You can get relief that way.

However, it's not the physician-guided care envisioned in the legislation.

There is also a risk that a person with a serious disease will be self-medicating to unknown, uncontrolled, and widely variable levels that are unacceptable to a doctor.

Certainly, people who have a serious disease will take that option because the alternative is unacceptable.

But for a physician, the tool is not there, and that's an important problem.

The second obstacle is that the conventional methods are not safe and clinically appropriate for many people. Not all, again.

But for many patients, the primary method,

smoking, is unsafe for everyone, and is not an acceptable alternative for many patients populations, including thousands of New Yorkers.

Cannabis smoke has more tar than tobacco and similar carcinogenic compounds, and similar respiratory risks. And that's particularly dangerous for people with compromised immune systems, such as people with AIDS and cancer.

Edibles are not unsafe, but they have some serious limitations as a form of treatment.

Obviously, people can get relief from them, but, they take 45 minutes to get relief. They deliver only 5 to 20 percent of the potential bioavailability of the beneficial chemicals.

So, there's a wide fluctuation in what patients are getting, and that creates a problem, again, for doctors.

Also, an edible doesn't work for someone who's, through pain or their treatment regimen, has lost their appetite and has nausea and vomiting, such as chemotherapy or in the late stage of any disease where you have pain and you lose your appetite. A brownie isn't going the work for you.

So, without some sort of an alternative, the net effect, if you don't include that metered-dosed

option in the legislation, is that some people will be left behind with no viable alternative, despite the best of intentions.

These are patients who need rapid, consistent relief without smoking:

Those who can't eat, as I've mentioned those;

Any terminal-stage patient who's immunocompromised or has a declining cardiopulmonary function;

Lost appetite, diversion of food.

Patients who have multidrug treatment regiment and need the reduced dosage variability to minimize the adverse effects, doctors need to know what they're putting into that patient because there's a range of other pharmaceuticals involved;

And people whose caregivers can't or won't take the risk of having secondary smoke.

That's a lot of patients who need the help of cannabis the most. They include:

Cancer patients getting aggressive chemotherapy;

MS, AIDS, and Chron's disease patients in advanced stages;

Patients with life-threatening and disabling cardiovascular complications of diabetes;

Anyone with advanced diabetic neuropathy;

If you have [unintelligible] or chemotherapy-induced nausea;

And those with cardiopulmonary functions.

So, we're talking about a lot of people here.

So what we're doing is, we'd like to respectfully urge, maybe to include in your legislation, a medical standard of care that works for all of these patients.

We have a technology, the vaporization technology, that delivers a smokeless dose and a metered dose, but there's other things, as well.

Charlotte's Web is a smokeless metered-dose option. It's in a measured dose of oil.

And, so, these are essential. This is an essential option for all those patients who simply say they can't smoke a joint or eat a brownie.

This option, also, from the State's point of view, is very important, because it answers the Drug Enforcement Administration's position on cannabis, where they say that medical-cannabis models, as they currently exist, and I'm quoting, "have not dealt with ensuring that the product meets the standards of modern medical, quality, safety, and efficiency."

And they cite, specifically, smoke marijuana, and the lack of standardized dosage and composition.

This goes to Senator Hassell-Thompson's comments and questions on dosing.

So, therefore, we would like to submit and request that you add a provision that specifically includes and allows a metered smokeless form of -- of all the forms, metered smokeless forms, of administration.

Our view on why that's necessary is that, in a context of federal prohibition, anything you don't specifically allow, you've excluded, effectively.

No one's going to deliver that option; take the time and the effort to try and enter the market, and run the risk, if they're not afforded the protection of state law, such as the other methods.

Thank you very much.

SENATOR SAVINO: Thank you.

And that -- thank you, everyone.

[Applause.]

SENATOR SAVINO: That concludes the roundtable discussion.

And, again, I want to thank all of you for sharing your personal stories, your testimony, and your advocacy.

The day is young. There are Senators to be hunted down.

Go get 'em.

Thank you.

And thanks, Senator Grisanti, for sitting through most of it with me.

SENATOR GRISANTI: Thank you.

(Whereupon, at approximately 1:10 p.m., the Compassionate Care Act Roundtable Discussion held before the New York State Senate concluded, and adjourned.)

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