Introduction to Christian Drapeau and Stem Cells

Welcome to The Conquering Chronic Inflammation Summit. I'm your host, Dr. David Jockers and I have the honor today of interviewing Christian Drapeau. He runs a company called stemregen.co.

And this is all about how stem cells are the most potent anti-inflammatory cells in the body. Christian is a stem cell scientist and author and creator of the first stem cell supplement.

He holds a graduate degree in neurophysiology, and he's been involved in medical research for over 30 years, the last 20 specifically dedicated to stem cell research.

He is known as really one of the leading experts in the world when it comes to stem cells. And he's the author of five books, including the bestselling "Cracking the Stem Cell Code." And he's published dozens of scientific papers on brain research and a biological process.

He coined, "Endogenous Stem Cell Mobilization", that we're going to talk about today. And he's lectured in 50 in over 50 countries on stem cell research.

Again, one of the most, well known world experts when it comes to stem cells, check out as well. His potent Stem Cell Mobilizer STEMREGEN at stemregen.co.

So without further ado, let's go into the interview. Well, Christian, great to connect with you and this whole world of stem cells. Really, really fascinating.

And you're obviously one of the world leaders. And so I'm excited to have this conversation. And so let's get started. For the listeners. You know, most of my people have heard of stem cells.

But, you know, they really don't understand them. And and they're important. So can you break that down for us? So, so what is a stem essentially stem cells.

For me, the best way to explain or understand what is a stem cells is to look at everything that we're normally used to look at, which is not stem cells, which is a cell of the skin of the retina.

cell of, of of of a muscle. they will they're all specialized cells. They will all do one thing. they will never transform into something else. and then to a large extent, will never multiply.

So stem cell is a completely at the other spectrum of all of this, which is at the other end of the spectrum, which is a cell that is nothing.

What Stem Cells Are and Why They Matter

As a stem cell, it's real identity if you want, or its real role is in its ability to transform into another type of cells, that will be a somatic cell, and they will multiply in the bone marrow for the entire life of an individual.

So they are highly proliferative and and become anything in the body. So there's sort of the, the mother cell, if you want, of the body. And what we have discovered by we, I mean the scientific community.

But we've discovered that they are the repair system of the body, which to me is probably the greatest discovery, in, in this whole field of stem cells.

Yeah, absolutely. And so the body's constantly producing stem cells, but some people are producing them more

and better quality than others. What are some of the things that contribute to poor stem cell production?

I mean, it's a big question because I don't think it's something that has been studied. so we we know through a lot of studies and observations that we do have what we call good mobilizes and poor mobilizes.

This means mobilization of stem cells out of the bone marrow into the blood circulation. And a poor mobilizer will have fewer stem cells in circulation.

And then there's the age factor that comes into the picture. As we age, red marrow converts into fatty marrow, yellow marrow that does not make stem cells.

So the number of stem cells decline as we age. But but the factors that will make you make less stem cells I don't think this has been studied. I'm actually working right now.

We're starting a whole, investigative work with a, with a, with a scientist and an expert on stem cell, sorry, on bone marrow physiology, because this has not been studied.

So to study the fact what can modify the rate of conversion of this red marrow into yellow marrow, is there a way to slow down that conversion? Is there a way even to reconvert bone marrow to make more red marrow?

we know that some elements that are going to reduce stem cell function, in the body are things like cigaret smoking, alcohol, stress. These are three things that will suppress stem cell function in the body.

So that's pretty much like what is known right now in terms of what can be what can prevent the role of stem cells in the body. Yeah. It's interesting.

And so we know with chronic inflammatory conditions your most chronic diseases people are dealing with related to chronic inflammation as at the root.

How does that how does stem cells play a role in that. Well there's two there's two very interesting angle to that. Question number one, something that is rarely talked about in, I would say not really known in the population because we talked about stem cells.

We talk about regeneration, but stem cells are extremely anti-inflammatory. So if we think of their natural role in the body. So when a stem cell, when you have an injury, that injury release a slew of inflammatory compounds.

The reason for these inflammatory compounds to a large extent, is to increase the flow of blood and lymph in that area to allow immune cells to better navigate around the injury, remove bacteria, but also to bring stem cells to that area.

Now, you cannot repair, as you have certainly seen, when you have an injury, when you repair, the inflammation goes away. You cannot repair while having inflammation.

And that's why inflammation is always associated with a chronic problem that does not repair. And the thing is that in the background, when a stem cell penetrates into an injury, the first thing that the stem cell does is to shut down and reduce inflammation.

So they are powerfully anti-inflammatory. But very locally at the site of an injury. So they are anti-inflammatory by nature. However, if you have a lot of these areas in the body that have chronic injuries, sometimes they're small, like there's nothing that that will really make your life miserable.

But is the thing where you get up in the morning and you have little pain here and there. So all these areas are called as you problem. You know them damage associated molecular pattern.

There's all kinds of little areas with inflammation and they leak.

Stem Cell Decline, Aging, and Inflammation

And over time they raise systemic inflammation. And what systemic inflammation does is that it blinds themselves in their ability to clearly see where to go.

So it's almost like a vicious cycle. You age, you have fewer stem cells in circulation, so you don't have enough stem cells to really repair all these small areas of injury.

They leak, they create systemic inflammation. And now whatever stem cells you have in circulation has a harder time to find where they need to go, to, to repair.

So, so that's, that's how stem cells are tied to inflammation, positively and negatively. Right. So when somebody has systemic inflammation, they are shutting down their ability to utilize these stem cells.

But also at the same time stem cells have a anti-inflammatory benefit when they come out. They're able to suppress cytokine formation and and help keep inflammation under control and balanced.

Correct. So so for example, what I'm working with. Right? I've been working with this for, for for quite some time. But if we have the ability to reduce systemic inflammation or even temporary with, things like curcumin or fight with and compounds that are known to suppress systemic inflammation, if you do this, you almost like reduce, reduce the noise in the bloodstream.

So by increasing the signal to noise ratio, meaning now stem cells can better see where the signals are coming from. Now you allow stem cells to find these areas go and repair.

And then you start to now reduce through through this feedback loop, reduce now the the continuation of that systemic inflammation. And by cutting this cycle you can really boost repair.

that's good. So that's one of the great benefits of utilizing anti-inflammatory compounds like you mentioned curcumin or imagine omega three fatty acids, things like that that have been shown to reduce inflammation.

They're going to allow the stem cells to be able to function more effectively. Correct. Yeah. That's great. And so how do we leverage the stem cells as a whole.

Right. you know, are there ways that we can, improve stem cell production? I mean, there, there. And again, you need to understand, in this old world of stem cells right now, when stem cells were discovered, at first we did not have a good understanding of how our own stem cells were regenerative.

So the whole field of medical research went to look at where can we find stem cells that we can utilize umbilical cord, embryonic stem cells. And then little by little, we discovered, oh, we have stem cells and fat tissue.

So now we start to use adipose derived stem cells. And as all of this develops, we finally realize our stem cells and our bone marrow are just as effective.

So so now we kind of go back to, to the beginning, understanding that our stem cells have great potential. But the research that's been done over the past 20 years focused mostly on other types of stem cells coming from other sources.

So most of the work that I have done is how we can tap into the regenerative power of our own stem cells. So in that work, if I, if I talk about the work that other teams have done, exercise like very severe exercise, intense physical activity will trigger the release of stem cells from the bone marrow.

I don't think it's a strategy for overall repair, in the sense that the reason why the body is calling for these stem cells is because if you have a bunch of micro lesions that you need to repair, so they get called to repair muscles, so you don't necessarily have them going in other areas.

I mean, to an extent. But if they go to other areas then it's your muscle that don't repair very well. So, from a quantitative standpoint, they're released to repair muscles.

the only thing that we know that can really increase stem cells for healing purpose is fasting. Fasting for more than three days. So far, I have not seen any documentation for intermittent fasting.

so it's all been documented for faster fasting more than three days. And if we want to do things to trigger the release of our own stem cells, that's kind of the area that I've been studied in for more than roughly about 23 years right now, is identifying plants that we have documented, trigger the release of our own stem cells.

So I started with blue green algae from Klamath Lake, which was the first one that I that I worked with. once we documented the mechanism of action, the active compound, proof of concept filing patents and all of that, we launched that first product in 2005.

But then over the years, the other ones that I have seen, which, interestingly, are more potent than the first one that we discovered, the blue green algae was just the first, but we have sea buckthorn berry from the Tibetan Plateau, aloe macro glider from Madagascar, Pentax, noted Johnson.

From from northwestern China, northeastern China.

Natural Ways to Mobilize Stem Cells

We have people coming from various seaweeds. So these are the main plants that we have documented can trigger or stimulate the release of stem cells from the bone marrow, putting more stem cells in circulation, because that is the key parameter the the link here, when we look at the entire literature, is the link between how many stem cells you have in circulation and the body's ability to repair.

If you can put more stem cells in circulation, your body will utilize them for repair. Yeah. Interesting. So these these plant compounds, they don't actually increase the amount of stem cells being produced, but they increase the endogenous stem cell mobilization from the bone marrow.

So they get them out of the bone marrow where they're kind of basically in a storage tank and get them into circulation where they can have their desired effect.

Correct. I mean, I need to put a little bit of a caveat here. We are limited by the instrument of investigation. What we count the only access that we have to stem cells is to count them.

So we count them in the bloodstream. I don't necessarily know where they're coming from, how they get there. I just count them in the blood. Now, as we documented the mechanism of action of the active of the plant that we have, the bioactive, those mechanism, mechanisms of action, all point very, very strongly to the fact that what we do is that we modulate the release of stem cells from the bone marrow.

So by now, I think it's pretty well accepted. That's what these plants are doing. But but the bone marrow has an extremely strong homeostasis. So when you release stem cells from the bone marrow, the level of stem cells on the bone marrow maintains itself pretty much where it was.

So. So as a consequence you do stimulate production of stem cells. Yeah. It's just that that we can quantify. So they're happening almost like together.

Yeah. Yeah that makes sense. And so do we. Have you, have you outlined the mechanism for what these plants like. Are there certain compounds that are in all of these plant compounds that you're studying.

Is there specific compounds. What are they actually doing to to trigger that endogenous mobilization of the stem cells. So the blue green algae, which is the one that we have studied the most because when we discovered this in 2001, the response by the scientific community was really was like, so what?

it doesn't mean anything. Putting more stem cells in circulation. Actually, maybe it's bad for you. and if you don't have a mechanism of action, then what you're looking at can be just like an artifact. So.

So we had to dive deeply in all of that to really investigate because we didn't know at the beginning. So these are all genuine questions. So to investigate what it was.

So for the blue green algae, what we found is that it contains a blocker of L selected al. So lectin is an adhesion molecule that can be activated by shear force, and also by an agonist by a molecule that binds to it.

And when that happens it triggers the receptor. Sorry. The expression of a receptor that is specific for for SDF one and SDF one is the molecule released by an injured tissue or by the bone marrow.

When the two connects, it makes the stem cell express an adhesion molecule, and it clings to the environment where it is. So if it's in the bone marrow, that's the mechanism to keep the stem cells in the bone marrow.

So if you block L selected, you reduce the expression of the receptor. With fewer receptors there's less of this connection. So less adhesion to the bone marrow to stem cells have a greater probability to get detach from the bone marrow.

So that's the mechanism of action for the blue green algae. Now when we look at nodal Jensen consumption of Noda Jensen will do two things. It will increase stem cell factor, in the blood and in the bone marrow which a which is a compound very well known to trigger both the, the, multiplication or proliferation of stem cells in the bone marrow and also their release into the bloodstream.

And it also reverse is the gradient for that molecule, SDF one, that is constantly released in the bone marrow. It suddenly decreases of the in the bone marrow and increases in the blood stream.

So now stem cells are attracted to the blood compartment. So these two together leads to a significant increase of stem cells in the blood circulation. That's the nodal Jensen.

Now if we look at some of the other compounds like the like the sea buckthorn berry, it seems to work by increasing the concentration of the compounds that normally your body releases when you have an injury.

So just like you have fasting mimicking compounds, we can call these compounds like injury mimicking compounds. So it fools your body to think that the body has an injury more or less.

So these are the three main mechanism of action right now that we have documented in these plants. Yeah really really fascinating stuff. And so you guys have put together your formulation stemregen.co when you're doing research on this.

And what have you found with that with that formulation blend, is there like a series of these things or what are you finding. Yeah. So so the idea of blinding them, blending them together is first most of the time in, in nature when in the human body when you have one outcome here we're talking about releasing stem cells happening through various mechanisms of action.

Then they sort of synergistically work with each other. So and you can also see on the curve of the release of stem cells like blue green algae will trigger a release that will be like a, an increase of about 25% at one hour.

And then it goes back to baseline within 2 or 3 hours after. When you look at an action with a Jensen C buckthorn berry or a little micro plot, you see a completely different behavior.

There's an increase in the number of stem cells, and by three hours it's still increasing. So we know that this is a more long term. By long term I mean a few hours release.

So so it tells you. Yeah. Correct. But it's a different mechanism of action. So we blended them. but the way that all

these plants blend together makes it very difficult to test the product itself.

so what we did is that once that blend is done, we then moved on to clinical trials that we're doing with various conditions. So if you really stem cells and we know that there's good documentation that by increasing the number of stem cells and circulation, you can help the heart repair.

So we started this study on chronic congestive heart failure. So we this study is in Madrid in Miami. So the study is ongoing. So we take individuals with at least two years of, of chronic, stable congestive heart failure.

So individuals with whom medicine has done everything that could be done for them. And all we do is that we add STEMREGEN So the study is ongoing. But at this point in time, after analyzing ten patients or participants that have been in the study after six months, they have normal heart function.

So we are studying we have started one in January on Parkinson. We're early to early right now to have data.

STEMREGEN Research and Clinical Studies

we're starting one also on COPD like emphysema. and we're preparing to, preparing studies on diabetes, spinal cord lesions and other conditions that we have seen over the years where we saw good results.

so, so as we publish them, as we finish these studies, we will publish them. But that's what we're focusing on right now, basically, to say we put more stem cells in circulation.

There's tons of scientific documentation that many aspects of human health can improve when you put more stem cells in circulation. So let's see what happens when we put more stem cells in circulation with that blend of plants.

Yeah. Really interesting. And did you say that with the congestive heart failure study? Obviously it's not finished yet, but you said that there were ten of the patients that went from having congestive heart failure to normal heart function.

Correct. And what is even more impressive in that study is that it's ten out of ten. So these are the first ten patients. And all of them after six months had normal heart function, which I was impressed.

Like I don't expect that. Well, I don't know. at first, I would not expect that when we're done with this study with about 30 people, that is going to be 30 out of 30.

But ten out of ten, is is is beyond what I was expecting. Yeah. Yeah. 30. Yeah. 30 people enrolled now, but these were the first ten that got started with it.

Correct. We started with ten because the first part of the study was really done to compare STEMREGEN with stem cell injection. And then compared any of these two with the combination of both.

Both because I'm working with a cardiologist, we have seen over the years that we need combines both. That's when he sees the best results. So we wanted to compare all of that.

we have done that right now. We have had a number of patients in the three groups, and now we're basically really boosting the number of people with just a STEMREGEN.

So let's keep going. And hopefully in another probably 12 months from now, we should have about 30 patients. Yeah. And so those ten individuals, were they doing both.

Were they getting stem cell injections as well. Just some region. Just stem just STEMREGEN. Yes and no. No other lifestyle counseling that they were given.

I mean these are patients that were all, I mean, lifestyle counseling, everything that is normally done for patients

with congestive heart failure. So most of the time, from a purely medical standpoint, I think that the best that is done is that they put them on beta blockers, high blood pressure, medication.

and oftentimes there's a lot of medication that they add to this. It's not coming to mind right now. Probably diuretics. Okay. Diuretics. Diuretics. so it's a combination of those three.

there could be a few other, and them and medication, but it's all it's nothing to help prepare the heart. It's it's all things to reduce the pressure that is put on the heart.

So the quality of life increased to some extent, but at the same time, the performance goes down if you want, like they're there, they're not suffering, they're not damaging their heart.

They're not continuing to evolve as fast. But they walk, I don't know, 5 to 10 stairs and they need to sit down and rest for catch their breath for ten.

Minutes as. Well. Yeah. Right. So after after six months, the only difference they go in some region and after six months they have improved about 2,021% in ejection fraction, which is the amount of blood ejection ejected from the heart with each heartbeat, which puts them at that point at about a 50% ejection fraction, which is normal ejection fraction.

So they and we do we do that six minute. We do that six minute, walking test. And and the clinic in Madrid, the clinic is on a slope. It's not a big slope maybe, I don't know like ten, 15 degrees.

So they basically make them walk that block and then see how they are after and afterwards they all start and they're completely out of breath if they can walk that block.

And at the end of the study, they all walk that block without any problem. I'm not telling you they're going to run a marathon, because that's not the aim of this study, but it's to help them just resume a normal lifestyle.

Yeah, it's remarkable findings so far. So, you know, it's really interesting to, to see how that study continues to progress. Fitness. absolutely. And so, so how are you how would you compare STEMREGEN to people?

Obviously, a lot of people are going they're getting stem cell injections, are getting stem cell therapies. What are the kind of the pros and cons and what's what's comparable with, utilizing the I mean.

The only study that like really compares those side by side is the one that we're doing is it's this study on congestive heart failure. right now, we got 21% improvement in ejection fraction with STEMREGEN, about 30% with adipose stem cell injection in about 40% with a combination of both.

The only caveat, though is that these were randomized, patients. And when we look at the data, the people that were in the STEMREGEN group started with an ejection fraction average of about 43%.

So the only you don't really bring these people to go much higher than, let's say, 50, 55%. So the leverage here to have an improvement is less than the stem cell group that started when an ejection fraction of about 38% or not on average.

So so they got a bigger increase. But it could be a bias just because they started lower to begin with. So as we get more number, with the STEMREGEN group, we will see how these statistics really, sort of get better.

But right now with the data that we have 21% with STEMREGEN, 30%, when you check with the adipose stem cell injection in 40 or 42% with a combination of both.

That's so far what we see. Now if I look at the stem cell literature. So this is just number comparing what has been reported. Another study that compares these two treatment side by side, these two modalities side by side.

We have seen that injection can really or injection itself can really bring benefits in many conditions. The gist though is that you will have generally speaking about 30% will tell you they get great results, 30% will tell you it was good.

You know, I didn't waste my money, but I didn't get all the benefits that I wanted to. and then another 30% will tell you it was a waste of money for them.

So stem cells are always regenerative. Now, when they are in your body, they will repair. So to me the question is why even have the not work in these people?

If it comes back to what we talked about before, systemic inflammation, good capillary circulation. If stem cells do not reach capillaries, then you can have them in your blood circulation.

They don't matter. So there are other things to help, to help the, the circulation and the role of stem cells in the body. when we talk about STEMREGEN, what we have in the scientific literature is a lot of documentation using drugs that are known to trigger a stem cell release from the bone marrow, but cannot be fully utilized for treatment because they have severe side effects if they're taken over longer periods of time.

And that's really where STEMREGEN becomes very interesting. It's not made to cure anything, but it's something that is natural, will help you release your own stem cells with more stem cells in circulation, essentially enhance or boost or support your natural repair system.

But it is safe for long periods of time. And as you do this, over long periods of time, you know, two capsules of STEMREGEN will release about 10 million more stem cells in circulation.

So do this for a month. It's 300 million of your own stem cells that you have released. Do this for three months to a billion of your own stem cells that you have released.

So over time, the benefit can become fairly significant. Yeah, that's really, really powerful. I'm I'm really intrigued by the research that you guys are doing and what you're finding here.

And so people can go to stemregen.co. That's the main website.

Benefits, Customer Results, and Supporting Repair

You guys have research and good content there. People can learn more about stem cells, how to utilize them, these plant compounds. And of course they can they can purchase the product as well.

and what are you hearing from your customers? I mean, we, we really hear everything that we would have expected. You know, the moment you put more stem cells into circulation, there's tons of literature.

I mean, if people want to go, I should have a lecture there on the website. if not, I'm sure there's one on YouTube. but but when I present, I show all that data.

There's clear data showing that once you release your stem cells, they can go to the heart and help repair the heart. They can go help repair the pancreas, deliver the lung, the brain, the the skin to join the spinal cord.

Like literally everything the liver, the lungs, everything in your body. That's and the proof essentially is that you're still alive today. The body is constantly going through a process of turnover.

You get a new liver every 2 or 3 years, new pancreas like it's six years. Half of the new heart every 25 years. So if you're if you're healthy today and alive, it's because your stem cells are working.

So all we're doing is that we're giving back to the body its ability to repair. When you were, let's say, 10 to 20 years ago, because that's really what it is.

Your number of stem cells decline as you age. The problems that you have at 50, you did not have them at 20. And the main reason is because you had plenty of stem cells to repair.

So by putting more stem cells in circulation, the product, there's no cure or anything. It's not really improve anything. It just gives back the body its own ability to repair.

And the results are what you would expect when suddenly you give your body its ability to repair. So we've just launched about, what, three weeks ago at the biohacking conference in Dallas, we launched two additional products because over the years I have seen that if we can, once you've released the stem cells, if you can suppress systemic inflammation to now make stem cells really better respond to signals coming from various tissues, then they can migrate.

They're better. And if you can open and improve the micro circulation by, let's say, nitric oxide precursors, by, making the blood more fluid with nitro kinase, by adding bio noise that help rebuild good environment vocabularies and polysaccharides to rebuild the glycol calyx.

Then you suddenly provide everything that is needed for stem cells that can be fairly big, sometimes 2 or 3 times the size of an actual capillary. So to allow stem cells to really squeeze to these capillaries then then you need that good capillary structure.

So now we've come with these products to really maximize the role of your stem cells. Once they have been released. Yeah it makes a lot of sense. So guys you can learn more.

You can check out Christian's great book "Cracking the Stem Cell Code.” And again go to stemregen.co where he's got a lot of great information. You can check out his STEMREGEN product as well.

Christian, thank you so much for your time, your expertise, and I look forward to just continuing these conversations as, as you guys get more and more research and data.

So thank you again for all the great work you're doing. Perfect. Thank you. David.