

**Exchanges at Goldman Sachs**

**The Future of 'Femtech'**

**Ann Roberts, Chief People Officer, Flo Health Inc.**

**Lea von Bidder, Co-Founder and CEO, Ava**

**Dr. Peter Kecskemethy, Co-Founder and CEO, Kheiron Medical  
Technologies**

**Antonia Riera, Executive Director, Investment Banking Division,  
Goldman Sachs**

**Allison Nathan, Host**

**Recorded: July 16, 2021**

**Allison Nathan:** This is exchanges at Goldman Sachs and I'm Allison Nathan of Goldman Sachs Research. We've discussed the convergence of technology across many industries on this program, including in the health care space. A small but growing segment of that market is emerging to more specifically address women's health care needs, sometimes known as femtech.

Today I am delighted to be joined by three leading voices in this industry -- Peter Kecskemethy, co-founder and CEO of Kheiron Medical, a machine-learning company that's helping radiologists detect early signs of breast cancer; Ann Roberts, chief people officer of Flo Health, which is an AI-driven women's health app that supports girls and women at every stage of their reproductive cycle; and Lea Von Bidder, co-founder and CEO of Ava, a digital women's health company with a wearable device and an app to advance women's reproductive health.

I'm also joined by Antonia Riera, who advises clients in the tech, media, and telecom group within our investment banking division. Peter, Ann, Lea, and Antonia, a big welcome to all of you. And great to have you on the program.

**Speaker:** Pleasure to be here.

**Speaker:** Thanks so much for having us here today.

**Peter Kecskemethy:** Thank you very much for having us.

**Allison Nathan:** As I mentioned, each of you help to lead companies that are using technology to advance the global health care system with a particular focus on women. To kick us off, tell us the story behind each of your respective companies and your personal journeys. Let's start with you, Ann.

**Ann Roberts:** Flo is the world's leading health app for women

that supports them during their entire reproductive life cycle from first period when you're in your teens to menopause, from pregnancy to young moms. And our vision is to significantly improve the health and well being of every woman, every girl, and person who menstruates in the world. We have over 190 million users, 1.4 million premium subscribers. We support women during their entire reproductive lives, through providing curated cycle and ovulation tracking, personalized health insights, expert tips, and a private community and a safe space for women to share their questions and concerns.

I joined Flo coming back from my maternity leave after having had two little babies last year, who are by the way Flo babies. So we used the app to conceive them. So there's a common ground why they are in the world today and why I am here on this podcast today. And that's Flo.

I am incredibly passionate about leveling the playing field for women across the world and the power of technology as an enabler of that. I was doing that previously in my role at Bumble. And now I am grateful to be part of Flo.

**Lea Von Bidder:** This is Lea. So we started Ava around seven years ago, and I have co-founders. And at that point, they were trying to get pregnant. And, you know, if you don't know much about trying to conceive, it sounds very romantic for many couples, but it's also not that easy for some others. And what's really important when you're trying to conceive is that you get your timing right. Women can only really conceive five or six days a cycle, and so it's really important to know when those fifth, sixth days are.

And traditionally and over the last decades, that has been done by really kind of cumbersome temperature measurements mostly. So for anyone who hasn't done that in the past, it's really about taking your temperature every single morning at the same time, waking up at that time even on weekends, and then measuring your temperature. And when it goes up a little bit, that's when you know that you were fertile in the past.

And so we looked at that a few years ago and said, okay, this is really kind of ridiculous in a world where we can do everything so easily. Why is it still so hard? And what we did is we said, okay, good, temperature, we understand that. That should be easier nowadays with wearables. But we also wanted to see if there's other measurements outside of temperature that could be interesting for us to look at. So we started with basically a

wearable that just measured everything under the sun that you could possibly measure and had women use it to understand are there other things that are changing throughout the menstrual cycle than just temperature.

And what we came up with is that there's actually multiple things such as heart rate, heart rate durability, profusion. They are all changing throughout the menstrual cycle. So what we're doing now is we're measuring around a million of those data points a night and for different algorithms that allows us to detect a firm window of women in real time and help them really optimize their chances of conceiving. And that's how really we started in the fertility world, and now we have, after a couple years, realized that this technology has tremendous potential also in other spaces within women's health.

So we're looking very closely at contraception, at menopause, and pregnancy.

**Allison Nathan:** Peter, tell us about your company.

**Peter Kecskemethy:** At Kheiron, we are using AI to help diagnose cancer better. We believe that cancer is primarily a problem and a complicated disease to work with because we don't know enough about it. We don't know enough about it in general, but primarily we don't know enough about it at the time of diagnosis or even tracking or follow up. We believe it's very much lending itself to be an AI-solvable problem, so that's why we're really using AI to help primarily radiologists diagnosing and tracking cancer well. And we're very much focused on breast cancer screening.

And we're focused on breast cancer screening because that's one of the largest sort of cancer diagnosis problems, the largest scale cancer diagnosis problem across the globe. Also probably the most successful screening program across the globe. But many people may not know that it's kind of at peril in most countries. Sustainability is quite a big issue. Quality is quite a bit issue, and we believe that AI can help all of that.

**Allison Nathan:** Although your companies are all attacking different issues, women are at the center of the mission. Do you consider your companies part of the femtech space? How do you define femtech? And why does it need a separate designation? Maybe, Lea, you can start.

**Lea Von Bidder:** So the advantage of being kind of an old startup

with our seven years is that we've been actually there when this term was coined, so we remember the space before and after. And here's the good things about getting us a name like femtech. Suddenly there were analyst reports on the space. There's podcasts around the space. So given the space, a name has really helped in terms of attention, also in terms of investor attention. And so that has really helped the space.

I have to say, after a couple years now, I have this love/hate relationship with the term. And again, I think it's good to give a space and name overall, but we really consider ourselves a health care company. And putting us under the term of femtech is sometimes putting the wrong label on what we do. We are health care. We run clinical trials. We are regulated and all of those things which are not typically not the case in the pure tech world.

So I think we're still trying to figure out what term works for a company that is working for women but really in the health care business.

**Ann Roberts:** This is Ann. To me, femtech refers to technology, the tech being developed in service of women's health, from periods to pregnancy to menopause. So we at Flo Health think that we're firmly in the middle of the femtech space. The products and the space serve different needs and purposes, including fertility solutions, period tracking, pregnancy, nursing care, women's sexual wellness, and reproductive system health care.

I think the division between medical and lifestyle products in femtech is somewhat artificial. It's not either/or for us; it's both. And for Flo specifically, we're aiming to bridge this gap, providing evidence-based, science-backed information and functionality in an engaging way to educate and empower women and everyone who menstruates to take control of their health.

**Allison Nathan:** Peter, do you have a view on that?

**Peter Kecskemethy:** Yes, so in our specific space, cancer, it's quite easy and clear to see that since cancer is the disease of the genes and also cancer is very much localized anatomically, it's extremely important to tackle it for various analytical parts. So there are elements of cancer diagnosis and detection that are very much falling into the femtech area. And pretty much everything that Kheiron does at the moment is falling there.

This is extremely important because breast cancer screening is one of I think the success stories on having attention on I believe past versions of femtech. But also, as I said, it's very much under stress and in peril. So having that attention I think to something that finally we can be proud of I think in health care in general, I think that that is extremely important to safeguard. And I think having a category can potentially help.

We also very much see ourselves as a health care company for sure, but we're very proud that we can focus on breast cancer screening.

**Allison Nathan:** Lea, you mentioned regulation. With many distinctions across the space, there's no one-size-fits-all business model. And a key difference does seem to be rooted in the need for medical regulation. In some cases, regulation is fundamental, and in others regulation is not required. Talk about how you've all navigated this. Peter, maybe you can start this time.

**Peter Kecskemethy:** I think in general in health care, I think regulation is an extremely important part because I think as patients we all want to be able to believe and trust all the medical processes, devices, drugs, etc., that are given to us because otherwise we all would need to be scientists in absolutely every disease. So regulation is really important I think.

However, I do believe regulation, the innovation cycle on regulation, of regulation itself, is not really as fast as it may need to be. And I think also the front lines, we have a bit of a responsibility to push that and show in what way we can help regulators understand how to be more efficient and actually what to look for, especially in the field of AI. I think there's quite a bit of nuance and quite a few new areas that we need to push what clinical evidence is really needed and what clinical evidence is not needed.

AI itself is very much automatic, so it can do clinical trials on a large scale that otherwise are not really have been doable in the past. So we can have volume at our side. We also have an attribute of AI called generalizability that is extremely important to achieve that is pretty much the synonym of patient safety. And I think it's important to shift from traditional regulatory views to sort of regulatory views that are necessary

for AI. And at Kheiron we are very much focused on extremely large-scale clinical trials that are focusing and showing regulators of where the signals are, where the weaknesses are, and what to really focus on, what to prove. There's a long way to go, but I think we're making some good headway.

**Lea Von Bidder:** I mean, I have a bit of a different viewpoint than Peter, but it's just rooted in the different kind of sub industries that we're in. If you talk about fertile days tracking, which is still the kind of key product that we have out there, the regulation here I would say is a lot of gray zone out there. Just to give you an example, if you're an app or you're a wearable like a Fitbit, you can do cycled tracking for end users and it's not regulated. So you can kind of tell your user, okay, we believe that you're going to ovulate on Day 13, and that's not regulated.

It's not regulated because the underlying algorithm is really dumb. The only thing that it basically does is it takes cycle lengths, divides it by two, and says, okay, this is your fertile date. And this is how most apps operate. This is how wearables operate. And as long as they don't make outrageous claims around that, they can say we're cycle tracking and that's not regulated.

The way that Ava has approached this from the very beginning is a different one. We have not one but multiple algorithms. Our entire framework is significantly more complex but then also significantly more accurate. And for that we are also making more regulated claims, and therefore we are in a regulated space. And I think for us this really was, in a way, a choice, right? So I think the difference to you, Peter, for us, you can choose to fall on either side of that coin. And we as Ava clearly decided to go the regulatory path, also with a look to the future where we know that further applications that we want to build are clearly regulated.

And also we've looked at a business model where we've said we want to be on the regulated medical track because eventually we want to be paid by payers, which is already the case for us now. We want to sell through providers, which we're also doing. And we want to have the best product for our consumer and for our patient. And ridiculously in our space, if you want to build the very best product, you're regulated. And if you want to build a less good product, you are not regulated.

**Ann Roberts:** For us at Flo, user safety, medical and scientific

soundness and credibility are an absolute must. They're table stakes in the industry. And we rely on sound medical research, regional research that we're partnering with world class universities and in excess of 80 medical advisors to make sure that we achieve safety and scientific soundness of the app.

The FDA is against companies seeking approval for pure marketing reasons. And as things currently stand, Flo is not aiming to get regulated under the FDA. However, it largely depends on which features we are going to develop moving forward. We absolutely may consider it in the future if we choose to develop the features such as health assistance chat bots that will be able to identify increased risks for certain conditions or anything that provides a diagnostic or medical advice or if we aim to move into the fertility contraception space that is also regulated.

So I think there is space for both regulation and not needing to be regulated depending on which space you are adding value to your ultimate user base.

**Allison Nathan:** Interesting. Antonia, let me bring you into the conversation. What's investing look like in this space? And how do you see it evolving? How do you think it will change in coming years?

**Antonia Riera:** So I think we all know we're seeing tremendous growth and record levels of investment in tech globally and in Europe. And health tech more generally is one of the spaces that is attracting larger amounts of investments. And then, as we were discussing, women represent half the population and so femtech itself has garnered a lot of attention.

I think what we've seen generally is I think we've seen very large and sizable success stories coming out of other verticals like fintech. I think health tech has lagged that somewhat. I think the expectation is that we will see large success stories in health tech, and indeed we're seeing them. But just given the relative size of the industries, there's no reason why health tech should be any smaller than what we're seeing in fintech or having any kind of less impact than maybe fintech, which itself is also a regulated industry like the health care one.

And when we're discussing how Lea and Peter and Ann felt about the femtech term, I think some of the reasons probably they said it was both a blessing but sometimes maybe constraining is that

I think femtech itself has yet to see some of those really large-scale successes. By that I mean large levels of investment, Series D's, IPOs. We've yet to see that in health tech and in femtech more specifically. That should come with time. And I think the expectation is that it does.

And what's so exciting about what Peter, Lea, and Ann are doing is that today we're talking about the application and those technologies are having for women but equally use our technologies and can be and should be and will be for other populations, for other treatments, for other conditions, for other illnesses. And I think that's what's very exciting. There are many applications for these technologies beyond femtech.

I think it is fair to say that today we have yet to see that, even though the expectation is that it will come.

**Ann Roberts:** This is Ann. I'd like to add something. When we talk about lack of investments and the tides turning, the other side of the investment market to look at is obviously returns. In Flo Health's case, we've been able to create a product that provides value to the ultimate user that is higher than the monetization point that they're contributing.

In the last 12 months, Flo's revenues increased over 107%. And that number of active subscribers is growing kind of 4x year on year. So I think there is the question of the investment community, but it's also the question of lack of sizable exits, where's the monetization model that shows sustainable growth in the industry.

**Allison Nathan:** Antonia mentioned the potential for your findings and products to actually be used beyond women for the broader population. Talk a little bit about that and some of the challenges to potentially scaling your innovations to that extent. Maybe, Lea, you start.

**Lea Von Bidder:** Yeah, so I mentioned before that Ava is really looking into other areas of women's health. You have to imagine that right now we are probably sitting on the broadest data set of physiological data of women related to their menstrual cycle, so there's a ton that we can still do there and can build up. But there's one example that I want to point to, which I think just shows us how the application, wearables, and AI works overall.



At the beginning of the COVID pandemic, we started to use our device to try to understand the early detection of COVID. And we've actually started building an algorithm. We're now in a large-scale trial with 20,000 people in the Netherlands to validate our algorithm to early detect COVID. And, you know, one of the interesting things when you build something like that is, in order to build a COVID detection, you need to really well understand the baseline of physiology. And the baseline of physiology is really, really complex for women.

And so what we've seen is we've seen other wearables running into this and basically detecting COVID for women every single month because they didn't understand the baseline, so they just assumed every time temperature goes up they probably have COVID. And that is not the case. There is a natural fluctuation that comes because of hormonal changes. And understanding this baseline physiology as we do in detail allows us now to build other medical applications on top of that for women where we use the physiology and the insights that we have.

So it's an example that really points towards the fact that having this broad database now allows us to really use wearables for any kind of medical application. Ava wants to really stay in the women's health field. We worked on COVID because it was, as you all know, a pressing issue. But it just points to the fact that there's so much we can still do with the technology.

**Allison Nathan:** Ann, do you have a view on this?

**Ann Roberts:** Yes, I would 100% echo what was just said. So health, if you think about health, femtech, menstrual health in particular, it isn't the sexist topic. Femtech is still perceived to be niche not only by investment markets but also the total addressable market, which is by definition half the world's population on the planet directly and the other half indirectly.

So people feel more inclined to look at tracking apps or tracking hardware products only if they feel they have a medical or health problem. They're not thinking about the benefits of tracking their cycle or female well being for everyday well being, feeling empowered, better understanding how to bio hack the cycles because they haven't had the first-hand experience.

So at Flo, in app, we're seeing that once they break through the barrier and they download the app, the user value is immediately visible through retention and repeat subscriptions. So for us,

we're really focused on spreading awareness and education of the cycle tracking so that we can grow the market to its full addressable potential.

**Allison Nathan:** Peter?

**Peter Kecskemethy:** At Kheiron, we are very much focusing on cancer as a whole. We're going through different sub cancer types. We believe we have very much solved almost all the problems or can solve almost all the problems in breast cancer screening. We have some of the largest studies. And many people don't know this is one of the hardest problems to the point that actually two radiologists have to look at every single scan. Normally it's one almost everywhere else. This is the one where it needs two. So one of the hardest problems.

Working off of that, we believe that we can expand quite a bit further to the other cancer areas, and we have early successes on that. And so that's the extremely exciting future. I think looking forward we are really aiming to make cancer much less of a scary disease than it previously has been. That's for all anatomical parts for all genders longer term but very much I think off of the platform of breast cancer screening.

I would say on the topic of what are the barriers, I think one of the biggest barriers is that when someone does something really, really large scale and long term, like it's just fundamentally the case, it's actually really hard to find the growth capital and generally the capital to fund that. I believe that has been one of the concerns in the past. I think that's probably less so the issue currently, which is great. And I think now with the advent and with sort of the clinical evidence that's coming to AI by some of the key players, I think we're getting actually the demand where now it's getting the growth capital to fund the extent of the need that is coming to us is going to be the next wave of complexity.

These are high-quality problems though I think at this stage, which is very welcome I think.

**Allison Nathan:** Lastly, let me ask all of you how you're thinking about the next stages of your companies. Ann, maybe we can start with you.

**Ann Roberts:** So next stage, as I said, for us at Flo is really be able to reach a wider total addressable market and also looking at how we can involve, for example, the other half of

the world in the journey. Because if you think about everything to do with female health, it's historically been a taboo subject. It's seen as being a female thing. And if we look at our strongest-performing segments with user engagement that is trying to conceive, becoming a mom-to-be, becoming a real mom, there's a real appetite. There are really amazing stories from our users from the partners in how they engage with the content, how they want to be part of the conversation, and how do we really make it a joining experience as opposed to "them and us" situation.

**Allison Nathan:** Lea, how about you?

**Lea Von Bidder:** I think for us we are a deeply mission-driven organization. And we are in the space because we want to make a difference for women. And I think our future will be guided by that. We want to continue empowering women with the tools that we have. And those tools being massive large data sets and medical wearable and a good understanding of AI and algorithms. And with that we want to build continuously. We want to build applications that will make women's lives better and easier and healthier.

And I as mentioned before, we are looking at the contraceptive space. We are looking at the pregnancy space. We are looking at the menopause space. That's really where we want to make a difference. And there's still quite a bit to do there, so I'm not going to venture further than that. But we really hope that we can bring more products to market.

**Allison Nathan:** And Peter?

**Peter Kecskemethy:** I see that we are in a very exciting time point where I think COVID has taught us that bringing tech into health care is actually a really good idea and doable. It's actually coinciding with AI getting mature enough. And I think the analysis of health care AI and the evaluation of health care AI is also getting mature enough. I think that's a very good sort of crossroads. And so basically I think this can be a starting point for us seeing solid technology coming into health care.

I think in the past we have seen fax machines and sort of matrix printers and all sorts still in hospitals. Bringing in AI as sort of the most modern piece of software technology I think is very much approaching now. I think us here on this call and a couple other players can actually lead the charge on this. From

our side what it means is really making diagnosis of cancer really reliable and absolutely making cancer a less weird disease for sure.

As a side effect, I very much hope that we can break down the barriers, the walls and really lead the innovation to everyone with what looks like how to bring safe AI into everyday practice.

**Allison Nathan:** And Antonia, from your seat in investment banking, what's the outlook? What's the future of this space?

**Antonia Riera:** So I think prior to COVID there was a clear -- I think long term everyone saw a clear need for greater application of technology and digitalization of health care more broadly in particular given the increasing health costs that we're going to see over time with an aging population, potential constraints from governments, and ability to spend on health care. So I think the long-term trend was there. I think there just wasn't that catalyst or impetus necessarily for investors today to invest in these technologies, that they didn't necessarily see that catalyst in adoptions of certain technologies and digital tools in health care today.

And starting with the practitioners themselves and sometimes allergy from medical practitioners themselves in doing things differently to the way they've been attending patients and giving care over the past decades, I mean, that was a big hurdle in and of itself. I think with COVID what we've seen is medical practitioners and governments just needing to give treatment differently, needing to use digital and technology -- and I'm speaking of much broader sense -- than what they'd had to previously. And it's worked very effectively. And I think that's been a real eye opener and a catalyst for change both at the medical practitioner level but also at the government level in terms of regulations, working hand in hand with companies like the ones we had on the podcast today and driving that change in change.

**Allison Nathan:** Thanks so much to all of you for joining us and for all of the amazing work you're doing that has so much promise.

**Lea Von Bidder:** Thank you so much for having us.

**Peter Kecskemethy:** Thank you.

**Ann Roberts:** Thank you.

**Allison Nathan:** That concludes this episode of Exchanges at Goldman Sachs. Thanks for listening. And if you enjoyed the show, we hope you subscribe on Apple Podcasts and leave a rating and comment. This podcast was recorded on Friday, July 16th, 2021.

**Speaker:** All price references and market forecasts correspond to the date of this recording. This podcast should not be copied, distributed, published, or reproduced in whole or in part. The information contained in this podcast does not constitute research or recommendation from any Goldman Sachs entity to the listener. Neither Goldman Sachs nor any of its affiliates makes any representation or warranty as to the accuracy or completeness of the statements or any information contained in this podcast and any liability therefore; including in respect of direct, indirect, or consequential loss or damage is expressly disclaimed. The views expressed in this podcast are not necessarily those of Goldman Sachs, and Goldman Sachs is not providing any financial, economic, legal, accounting, or tax advice or recommendations in this podcast. In addition, the receipt of this podcast by any listener is not to be taken as constituting the giving of investment advice by Goldman Sachs to that listener nor to constitute such person a client of any Goldman Sachs entity.

*This transcript should not be copied, distributed, published or reproduced, in whole or in part, or disclosed by any recipient to any other person. The information contained in this transcript does not constitute a recommendation from any Goldman Sachs entity to the recipient. Neither Goldman Sachs nor any of its affiliates makes any representation or warranty, express or implied, as to the accuracy or completeness of the statements or any information contained in this transcript and any liability therefore (including in respect of direct, indirect or consequential loss or damage) is expressly disclaimed. The views expressed in this transcript are not necessarily those of Goldman Sachs, and Goldman Sachs is not providing any financial, economic, legal, accounting or tax advice or recommendations in this transcript. In addition, the receipt of this transcript by any recipient is not to be taken as constituting the giving of investment advice by Goldman Sachs to that recipient, nor to constitute such person a client of any Goldman Sachs entity. This transcript is provided in conjunction with the associated video/audio content for convenience. The content of this*

*transcript may differ from the associated video/audio, please consult the original content as the definitive source. Goldman Sachs is not responsible for any errors in the transcript.*