HealthTech Innovation Days

October 4&5 2021

At the Peninsula Paris and virtually

+ 800 Registered participants with 500 in Paris
+ 155 Selected European Healthcare companies
+ 1,300 Private meetings
+ 15 Pharmaceutical groups & industrial
  20 Conferences with 87 speakers
+ 300 investors from all around the world

PARIS HEALTHTECH INNOVATION DAYS
HEALTHTECH FOR CARE
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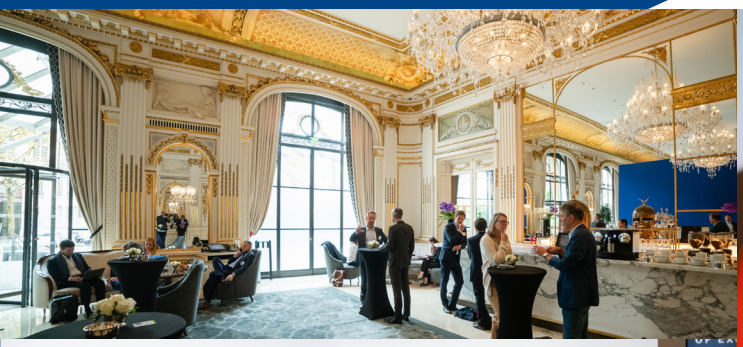

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The European Forum: HealthTech Innovation Days

Interview of Maryvonne Hiance, President of HealthTech For Care, Initiator of HTID

This 3rd edition of HTID, the European event in Paris, was once again a real success.

More than 300 global investors, 155 European companies, about fifteen pharmaceutical groups and industrials more than1,300 private meetings. In addition, this year we effectively mobilised very high level global investors from North America and European countries, representing more than 900 billion dollars. The arrival of these investors was encouraged by the lunch we had at the Élysée Palace with the President of the Republic, Emmanuel Macron.

This 3rd edition was very well supported by many institutions. Indeed, the President of the French Republic participated in the opening via a video in order to explain the government's desire to encourage the development of innovative health technologies in France and Europe, thanks to a certain number of actions decided by Mr Macron.
We had the honour of receiving Thierry Breton, European Commissioner, as well as Agnès Pannier-Runacher, French Minister for Industry. We were also received by Olivier Véran, French Minister of Health, to conclude these two days.

HTID provides an opportunity for all the European players to meet and we are aware that Europe will play a major role in the future in accelerating these innovative technologies. This is why HealthTech for Care has concluded important agreements with various European players and clusters in the field of health. The first agreement since 2020 is with EIT Health which is involved in the development of this event. And this year we have actually signed agreements with 10 European clusters.

We had two days of very rich round table discussions on the different therapeutic challenges for the years to come: New therapies, bioproduction, antibiotic resistance, etc.

I would like to thank all our sponsors that have enabled us to organise this event. Many sponsors have been loyal since the beginning and encourage us to continue.
In conclusion, for 2022 we will continue to make Paris the European capital of innovative health technologies.

Interview of Jean-Marc Bourez, Managing Director EIT Health France, Invest Health Co-managing Director, Head of the Venture Centre of Excellence & Alain Godard,CEO, European Investment Fund, EIF/FEI

Collaboration with EIT Health and the European Investment Fund

Jean-Marc Bourez: I would like to start by mentioning the collaboration with the European Investment Fund: a couple of years ago we decided to tackle a significant number of market failures by increasing the firepower of the European VC funds to co-invest alongside the corporate partners into the European companies' portfolio, especially for promising startups and SMEs in biotech, MedTech and digital health. And it appeared clearly that we were definitively keen to collaborate with the European Investment Fund to make this happen.

Alain Godard: The EIT Health-EIF collaboration is a great one because we are able - in the context of HTID but also beyond - to elaborate a strategy around health technology and to reach certain targets that we were not able to reach before. I'm thinking notably about the corporates, which are normally not part of the financial ecosystem.

Achievements of the VCoE one year after HTID 2020

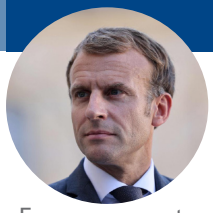
JMB: Last year during the HTID 2020 and following Thierry Breton's call to action, we announced the official launch of the Venture Centre of Excellence (VCoE). With a strategic decision from the Commission to deploy an investment of €150 million as an anchor investment within the VCoE in sustainable development and health compartment to start and kick-off the activities by recruiting corporate partners that we are willing to engage into such a co-investment programme.
As of today, we can be proud of the significant key achievements regarding the number of already selected fund managers which are covering Europe, 2 from Spain, 2 from France, Germany, Switzerland, Nordics and so on. With an aggregated fund of €1.7 billion already available to start to convert into the targeted started portfolio companies.

AG: So, EIT Health and EIF are very much complementary. Because EIT Health is an institution that brings money but does not invest directly into companies, we need in between some intermediaries and that is why we are working with fund managers to invest directly into companies.
The knowledge of the companies, researchers and start-ups helped us a lot to design the financing programmes that we put in place. It is extremely helpful working together and to complement each other in this field, at least to complete these amazing ecosystems.

Creation of InvestHealth to support the scale up track of the promising Healthtech companies

JMB: In this context to complete the statement of the EIF regarding the scale up of promising health tech companies in Europe, we decided a couple of months ago to manage the creation of EIT Health Services and Investment GmbH (InvestHealth) which will take care of the scale up track of the promising biotech companies and health tech companies, meaning that, as a signatory body of the strategic Cooperation Agreement with the EIF, InvestHealth will be in a good position to bring its expertise.

French and European Support



Speech of Emmanuel Macron, President of the French Republic, @opening ceremony of HTID3 – Replay here

«France promotes the launch of a common European project that specially targets projects ranging from R&D to the first steps in the industrialization in the healthcare sector.
We are strong supporters of HERA to strengthen preparedness and response serious cross-border health threats to support investments in areas where states alone cannot go.
To conclude, I just want to say that the Health Innovation 2030 is in fact a package and it is something never seen in the French health industry.
For me this strategy is a cultural change, a turning point.
Therefore, to fertilize this strategy, we need health innovation, and we need your project, your own culture, your own willingness. I need your help to succeed, and France needs your help.»

Speech of Thierry Breton, European Commissionner, Internal Market, European Commission @HTID3 in Paris – Replay here

«The Commission, together with industry, has developed a plan for Innovation Health Initiative, a joint undertaking under Horizon Europe. We need to be more recon in this.
In these companies, around the cross-sector project, we'll definitely have the value we need for our velocity but also for the rest of the world.

Secondly, I just wanted to mention that we have decided to launch with Member States an IPCEI.
IPCEI is an instrument where we could put together, while respecting WTO regulations, public money, and private money.
So, it's extremely important and this will be an addition to make sure that we will be able to boost the sector. We have a successfully developed IPCEI in a battery of sectors, for example we are doing one in hydrogen.
We will do this for health, and I just wanted to say this and to announce this to you.

That's something extremely important, but now it's time to mobilize private funds, because of course we'll put public money. We have a strategy, we have an ambition, we have the landscape, we have the skills, I mean everything to invest here in Europe and, by the way, you go to invest here in the Pharmacy of the World.»

Speech of Agnès Pannier-Runacher , French Minister Delegate, in charge of Industry @HTID3 in Paris – Replay here

«The national strategy is mirroring the European strategy, we are pushing same areas of therapy at the national level.
We want to pre-notify this IPCEI to the Commission at the first half of 2022 and we will have fortnightly working groups organized to refine the scope of the IPCEI.

France supports the emergent of HERA with reference to the BARDA model in the US.
This agency should bear a strategic vision, stimulate innovation in health sector and support crisis management.
The authority, should be, operational by 2022 and responsible for assessing potential threats, supporting research and innovation, and make sure to produce sufficient medical supplies.

The first key takeaway of this conference is Health and it is a key top priority for France. We need all of you, investors, startups, bigger pharmaceutical companies. The second takeaway of this conference is the need to develop and manufacture innovative solutions in France, and to help talents coming to France to create or drawn ambitious innovative companies.»

"The 3rd edition of HTID was a real success with a record number of participants gathering in Paris to discuss the future of health innovation in Europe. We were also honored to organize a lunch meeting between President Macron and top global investors at the Elysée Palace, strengthening links between the international investor community. We look forward to the continued growth of this important event over the years to come." **Cédric Moreau, Partner at Sofinnova Partners**

Tomorrow's economic and investment challenges for the health sector in Europe

Empower innovation in healthcare to foster post-pandemic EU's economic growth

Speakers: Christian Pierret, Patrick Artus, Jan-Philipp Beck, Pierre Gattaz, Randall S. Kroszner & Bertrand Lepine

To watch the replay click here

Interviews of Christian Pierret, French Former Minister in charge of Industry & Patrick Artus, Senior Economic Advisor at Natixis (from left to the right)

Christian Pierret: The very problem we are matching today in our industries and health ecosystem, is to accept taking risk in a sector where the efforts of innovators are rewarded with huge pay off, but get in the long term and charged with highest factors of uncertainty. Combination of disruptive innovation and high rentability business model is the new challenge of the economy of future. To a certain respect, entrepreneurs in healthtech, Medtech and Digital tech are "heroes" of the modern state of the art economy. The Covid gives an eloquent example of this new problematic.

During the COVID crisis, entrepreneurs keep in their mind natural optimism because they understand that everything comes from their spirit of entrepreneurship, their swift decision-making audacity to take risks and to invest a lot of money in new creation of value paths. They rely more on R&D, patents, competition, than on exclusive confidence in the public support and subsidies. Speaking shortly, they prefer to be a rapid task force than a secure administrative process, provided with states bodies and public organizations.

So here what is at stake is how to mobilize the huge amounts of money all over the world– especially hundred and hundred billion dollars of liquidities, which are available for good yields.

I speak under your control, dear Patrick. I think that about a third of the total GDP of the world is now in circulation, as money. We raise the question: How to mobilize those impressive amounts to invest and create value for the benefit of health?

Patrick Artus: I think we had in this panel very good debates, but two very crucial questions arose.
The first one is the one Christian just addressed, which is, we live in a world with an extraordinary level of savings.
These savings are mostly today in the form of deposits, which means money and they have to be reinvested.

"2021 edition has attracted much more diversified companies both in terms of segments (pharma, med-tech but also digital health, an expanding area!) and nationality, opening the door to many European innovative groups. Quality of the panels, top tier investors presence and speakers from the French State have clearly consolidate this event as a "must" within the health tech community." **Elena Coluccelli, Managing Partner Transaction R&Co, Rothschild & Co**

The challenge is to reinvest these savings in the course of the next few years, in a way which is positive for the economy, for the welfare of populations and not in a purely speculative way.
And there is a temptation today to move to very speculative investments. Look at what's going on with cryptocurrencies with commodities with real estate and property?
So, I think the first task for the government is to provide the right incentives that savers investors have the incentive to move to the right investments whose will really be beneficial for society.
And I'm not sure we're there!
For instance, in a country like France, you've got a huge incentive to invest in very safe assets financial assets.
So, this is, I think the first role of government is really to put in place the right investments to move savings to interestingly, risky investments.

As a second, I think the question for the governments which we also debated during the panel, is about what their role is. Because there is a temptation also to make it that government still take the full burden of these risky projects.
So, you want to develop a vaccine. If it turns well, it is for the private company. If it does bad losses, it is for the government. I would say that to be fair as far as the sharing of return of losses successes is concerned, you need to do something, but it is very difficult to achieve.
Perhaps a way is what has been suggested by one or two of the speakers which is, has the government commit on purchasing the product once it's developed if it works which is having a rather fairway of supporting your project and a second issue or so is that you should not finance everything using debt.

You need a lot of equity financing so there is no debt financing or very risky projects, I mean because the interest rate can never reflect the degree of risk of the project. So, you need a lot of equity finance which is much more complicated these days than debt finance because you've got banks.

You've got normal lenders. I mean, you can have a lot, but the debt funds get a lot of debt, finance, equity, finance it's more complicated to get, but we need a lot of equity because only equity can bear the risk of very risky investments.

Energizing the market in Europe

Speakers: Stephanie Léouzon, Elsy Boglioli, Hans Herklots, Laurent Levy, Cédric Moreau, Guillaume Morelli

To watch the replay click here

Interview of Cédric Moreau, Partner at Sofinnova Partners

We had a very interesting round table discussion on this topic. At Sofinnova Partners, we have built and launched the Crossover strategy with the goal of contributing to the immense potential of the European biotech market through the fostering of greater synergies between private and public markets.

The Sofinnova Crossover strategy invests in both private and public companies, identifying the right assets with the right management at the right time. We support European innovation, not only by providing the financial capital, but also by helping to build top-rate syndicates with global investors who share our objective to accelerate the growth and development of European scientific excellence. Above all, we believe in the importance of the people and the science in building the global market leaders of tomorrow.

Sofinnova Partners brings the expertise and knowledge of 50 years of experience to the service of our CEOs and the leadership teams who doing the heavy lifting on a daily basis. It's all about collaboration capital.

What has the pandemic changed from an investor's perspective?
What comes to me is two words: Perception and trust. Perception and trust about science - With more than 150 companies that were selected based on breakthrough science, really interesting technology, promising projects, like European champions such as BioNTech.

Perception trust about the impact of investing - What's more impactful than saving lives? Improving quality of life, bringing new therapies, bringing projects to the patients.

And third, if we look back to the market performance, it's also perception and trust about the resilience of this industry.

When the whole world was on standby, the Health Tech sector continued to grow to accelerate and to build value. So, coming back to perception and trust, it's important to accelerate and create our champions of the future just as the Health Tech did. It's an absolutely unique sector.
This resilience, this contra-cyclic performance, is also the reason why both public money, but also private investors and private inflows and, more and more, some partnerships in the private and public sectors are ready to invest, to commit, to support Health Tech.

It's also the long-term view: how do you create the value in the long term and what is also the promising value of Health Tech. For me, it comes down to the benefit of the patients, that's the goal.
During this conference we also organized some very interesting roundtables about digitalization.

Digitalization is about improving clinical trials, improving the 2.0 biomanufacturing patterns, and also improving access for patients to data and to new products. If we forget to bring value and to help patients we miss the opportunity and we miss our mission.

"Euronext as the world's leading market for Medtech companies and Europe's largest market for Biotech SME's is once more very happy to be partnering with France Biotech and HealthTech For Care.
This third edition is a new opportunity for the HealthTech Innovation Days to show the world the importance of Life Science companies - as was seen this past year - as well as how important it is to bring funds to such a crucial sector. This event, brilliantly organized, was a chance for us to discuss the news of the financial markets in this area and the dynamics to come." **Camille Leca, Head of Listing France, Portugal & Spain, Euronext**

Pharma – Venture Capital partnerships to support the Healthtech sector

Speakers: Luigi Ravagnan, Laurent Arthaud & Daniel O'Connell

To watch the replay click here

Interview of Luigi Ravagnan, Director, Strategic Collaborations, Global Medical Affairs, Bristol Myers Squibb

"Pharma-Venture Capital partnerships to support the Healthtech sector"

At this round table, we had the pleasure to host a conversation between Daniel O'Connell, Executive Director for Equity and Venture Capital Investments at Bristol Myers Squibb, and Laurent Arthaud, the Managing Director for Life Sciences, Ecotechnology and French Tech Acceleration Investments at Bpifrance, who shared some interesting perspectives on how pharma and Venture Capital firms see each other as partners in the healthtech sector.

Why do pharmaceutical companies, and Bristol Myers Squibb in particular, partner with the Venture Capital community?

I think Daniel articulated very well why the Venture Capital community has been quite important historically for our sector and will continue to be so moving forward. For Bristol Myers Squibb this is connected to the company's approach to external innovation, which is complementary to our internal R&D activities.

Pharmaceutical companies like ours cannot generate innovation all by themselves and Venture Capital firms have been important partners in identifying novel technology. Their geographic footprint, networks and expertise in sourcing innovation, especially at the very earliest stages of development, often goes beyond our own reach.

Thus, they are precious partners to help us explore the future of innovation in our priority areas of focus. During the round table, it was also very interesting to hear from Laurent what pharmaceutical companies, in turn, can bring to Venture Capitalists, particularly expertise in different pathologies and knowledge in important areas such as drug positioning, clinical development, regulatory and market access.

What have been the key drivers for BMS to invest in a French Venture Capital fund such as InnoBio2?

We have been very interested in the InnoBio2 model, where private investments provided by Limited Partners such as pharmaceutical companies are matched by public funds, and where the management team operates like in a private venture capital firm.

This was the first time that our company had invested in a Venture Capital fund in France and one of the few we have in Europe. We saw this partnership as valuable opportunity to increase our presence in the French healthtech ecosystem, an increasingly vibrant geography for company creation. Recognizing the in-depth knowledge of the local public and private stakeholders that InnoBio2 has developed over the last few years, we were excited to partner with this team.

What are the roles of the Global and of the French organizations in these external partnerships?

This a very important question. I think the partnership we have entered with InnoBio2 is a very nice example of cooperation between our affiliates – in this case the French affiliate - and the Global Organization, to identify, assess and execute novel external partnerships.

BMS France has been a very important affiliate for a long time in clinical research. Over the last 5 years, it has also spearheaded a program for academic collaborations in oncology called the "Global Expert Centers Initiative". Our partnership with InnoBio2 has increased and diversified opportunities for both the Global and French organizations to interact more efficiently and fruitfully with the healthtech ecosystem and to stay on the cutting edge of innovation in the space.

« Bristol Myers Squibb is committed to collaborate with external innovation partners to speed transformational medicines to patients. We welcome the success of the HealthTech Innovation Days 2021, which succeeded in their third edition to gather key private and public stakeholders of the French and European healthcare innovation ecosystem to exchange around key topics of interest and generate new partnerships. » **Luigi Ravagnan, Director, Strategic Collaborations, Global Medical Affairs, Bristol Myers Squibb**

Long-term investment in the Healthcare space

Speakers: Florence Lustman & Laurent Saint-Martin

To watch the replay click here

« Beyond their protective role, insurers support innovation in healthcare through investment »

2 questions to Florence Lustman, President of the French Insurance Federation (Fédération Française de l'Assurance – FFA).

What are the roles played by French insurers in promoting health and well-being in Europe?

96% of the French population has access to a comprehensive health coverage through the combination of national health coverage ("Social welfare") and healthcare insurance providers. 90% of French people are satisfied with this system. Insurers play a key role in the health system through their involvement in the various stages of the health care process: reimbursement but also prevention and patient support.

Competitiveness in the health insurance market generates emulation and innovation. I am thinking of e-health: online second medical opinion, online nutrition coaching, teleconsultation for instance.

Insurers are facilitators & enablers: because we manage risks, we enable society (and entrepreneurs) to take them.

How are insurers investing in health and innovation?

Beyond their protective role, insurers also support innovation through investment. Insurers are the biggest institutional investors in Europe with ten trillions euros in assets. French insurers have launched the « Relance Durable France » program, with Caisse des Dépôts, to support the French economic recovery following the pandemic. Set up in 2020, this global investment program of €2.45 billion, mainly in equities, is designed to help mid-caps and SMEs in the various sectors affected by the crisis. More than 30% of the program is dedicated to health (Biotechnology,Pharmaceuticals / Fine chemicals, Healthcare Technology). Insurers also invest in the health sector through dedicated funds.

French insurers are some of the most significant contributors to the "Tibi" fund, dedicated to the financing of technology companies. French institutional investors pledged in 2020 to devote more than 6 billion euros to this fund by December 31, 2022. Biotechs, healtechs and MedTech's are among startups that could benefit from these funds once they are fully deployed.

Insurers are also driving innovation: The French Insurance Federation has decided to join IMPACT, a startup accelerator dedicated to mental health. As a conclusion I would say that Insurers play a key role in promoting innovation through health contracts but also as investors in the productive economy.

This makes me say that underwriting an insurance is a double act of citizenship: you protect yourself and you contribute to better protect society.

Financing the next wave of Leaders in Biotech

Speaker: Rafaèle Tordjman

To watch the replay click here

Interview of Dr Rafaèle Tordjman, MD,PhD, Founder & CEO of Jeito

What makes JEITO different?

Jeito promotes a new continuity investment model, which provides continuous financial and operational support to talented management teams working on cutting-edge medical innovation and breakthrough therapies. We believe this continuity of capital and expert guidance has the potential to accelerate product development to global commercialisation and deliver faster life-saving therapies to patients and attractive returns to investors.

One key differentiation is also the multi-talented team, integrated in the investment team, with over 20 years' experience across the entire value chain of the healthcare sector, from developing groundbreaking therapies to mastering patent strategy, achieving regulatory milestones and bringing them to market.

Jeito is also the first Biotech fund labeled "Tibi" fund, following the report from the economist Philippe Tibi. This report requested by the French government demonstrated the need of growth funds in tech and biotech in Europe and France and resulted in €6 Billion gathered from French insurances companies to invest in Growth tech funds. We should congratulate such initiative aiming at reinforcing the late-stage financing of Biotech companies to translate them into global leaders.

What do you consider to be the short-term priorities?

We have learned to work differently during pandemic, attract & retain talents from all over the world to our ecosystem/companies, with international experience, develop the "entrepreneur mindset" inside companies – risk-taking, starting from scratch, failing fast… One of the pillars of this plan is private resources. We need Talents – we need them to develop tomorrow's leaders.

Attracting the attention of potential investors, talent management – attracting & retaining international talent in research, innovation and business creation in biotechnology and new medical technologies, will therefore be at the heart of this mission.

To achieve such goal, one of the short term priority is also to reinforce the bonds between the different stakeholders.

"I am pleased to have participated to the third edition of HTID, which gathered different high-quality international stakeholders of the HealthTech ecosystem : some talented entrepreneurs & founders, leading investors in Life Sciences, public authorities, renowned pharma industries… It is crucial to work together as an ecosystem to promote breakthrough medical innovation in Europe." **Dr Rafaèle Tordjman, MD, PhD, CEO & Founder of Jeito**

Innovation is less risky...if radical

Speaker: Philippe Pouletty

To watch the replay click here

Interview of Philippe Pouletty, M.D, Co-Founder & CEO, Truffle Capital

What I'd like to say today is that only radical innovation can revolutionize medicine or save the planet, but too often in France and Europe people shy away from true innovation.

So, what is radical innovation for me?

It's great science which you might be able to transform in a product to revolutionize the treatment of patients.

It's a project where you are not sure you will succeed, but with great talents, CEOs, CMOs, heads of R&D, board members, cash, a little luck, and patience, you might develop a product which will make the headline and great scientific papers in Nature journal and, that regulatory agencies, key opinion leaders and payers will want then.

As an example, when we started Carmat, a total artificial heart, with Alain Carpentier, 95% of people did not believe in this risky project.

When we started Abivax in the field of mRNA for inflammatory disease, barely anyone would believe in this approach.

When we started Carbios, we were the only ones saying biotech might solve the difficult issues of recycling plastic.

No one believed in them and five to ten years later, Carmat is on the market, Abivax reported Phase 2b positive result for ulcerative colitis and Carbios started industrial demo plant very successfully and we continue to start companies like these.

Why is radical innovation a plus to build big companies?

Because you can have very strong patents, you can have high premium prices, high reimbursement, you can have fast track regulatory approval, of course during the R&D phase you can also have disappointments, delays and so on, but all these don't matter and if you always stick to your mission you will succeed.

Radical innovation can help France and Europe come back in the game of biotech for health care and for the planet.

The vital role of risk capital for life sciences and the path to a competitive Europe

Speaker: Yann Le Flohic

To watch the replay click here

Interview of Yann Le Flohic, France Country Director, LSAA

Our initiative called Life Sciences Acceleration Alliance (LSAA) is a new advocacy coalition that we revealed during HTID. What is it about?

Our aim to create a collective voice of early-stage venture capital and investors in Europe because our community is not being heard enough.

For the past year, only €4.3 billion were invested in the life sciences sector, according to the European VC organizations, in the US this figure is more than €31.2 billion.

How can European VCs close this gap ?

Risk capital plays a very important role. We need to bring our expertise and views to policymakers.

The ambition of our initiative is to change the perception by giving the community a real voice and the opportunity to engage with the European decision makers on key issues that are critical to our industry.

The debate on the TRIPS waiver and patent rights –shows how little venture capital and the risks we are taking is understood. Looking at global Intellectual Property, the COVID-19 vaccine is a powerful example for what can be achieved in the life sciences sector when private investment can help accelerate innovation, which can then be used for public good.

Competitive pricing, IP protections and incentives, as well as coverage and patient access are all critical for the life sciences ecosystem to thrive. If the patent protection for vaccines were to be suspended, it would not only disincentivize innovators who brought us the COVID-19 vaccines at record speed, but would pose a long-term threat to the EU biotech industry.

But of course it is hard to explain the role of IP to policymakers – especially with so much noise about this issue. That is why we must be educating policymakers. We want to be a catalyst. There is not only Science in Europe, but Capital as well.

This ought to be our common goal.

Accelerating the development of innovative European healthcare companies and products to support better care of patients.

But in order to successfully do this, Europe needs a competitive market to elevate and accelerate innovation within its borders.

We are at the very beginning of the initiative, and we encourage every investor and VC to be part of LSAA and participate in our newly formed industry Advisory Council. Visit us : www.acceleratelifescience.org

«HTID3 has been a great success and a key milestone for us to introduce for the first time our initiative Life Sciences Acceleration Alliance. We were thrilled to receive such a positive welcome from the participants regarding our newly formed European advocacy coalition. The voice of early stage investors and venture capital must have a seat at the policymaking table overseeing the future of our industry. We look forward to the 2022 event.» **Yann Le Flohic, France Country Director, LSAA**

How e-health will revolutionize the care pathway?

Speakers: Alain Decombe, Filippo Monteleone and Philippe Peltier

To watch the replay click here

Interviews of:
- Alain Decombe, Partner, Deputy Chair for Inernational Operations, Dechert LLP, (middle)
- Filippo Monteleone, Founder, CAREIT & Chairman, Essling Capital (right)
- Philippe Peltier, Partner, Kurma Partners (left)

The aim of this roundtable was to address hot topics on e-health, knowing that digital technologies came quite late to the healthcare space.

There is a critical need for more digitalization in such space. The Covid pandemic underlined the need for a radical change on how we think of and provide healthcare. An app won't replace a healthcare professional, but it will ease the management of the workflow. It will also allow us to better prevent, diagnose and monitor patients to adapt the right treatment at the right time to the right people. New digital tools will enable the system to operate more efficiently and provide the best possible treatment.

For care providers, one of the main issues is how to tackle the fragmentation of care through the care pathway. It is even more urgent today with chronic diseases representing 80% of expenditure growth. Digital technology helps to create an environment where not only a patient can book his or her consultation, monitor it and attend it, but also where doctors can share their insights and treatment solutions on digital therapeutics tools.

Another important topic discussed was market access for healthtech companies. A big challenge is how to get the users' point of view to help startups that have great ideas, great mathematicians, great algorithms, find the right market at the right time.

Most applications or digital products available today are not reimbursed. This is an issue for the digital health players, although several of them have found ways to piggyback some of the existing structures to get reimbursement and find the right business model. The digital app is still a very young sector. Since its beginning in 2010, we have experienced many strategic changes. Investors have had to adapt their contributions. The right business model will arise as we see more and more ways of getting payments for the products. There are two things to keep in mind with market access. The first is that the pandemic accelerated this need because the awareness of regulators and payers dramatically increased, especially during and after the lockdown. It means new rules for the startups to access the market. The second is about new financing. One of the key numbers that was mentioned during the roundtable is that before the pandemic, there were 10,000 teleconsultations per week – compared to 1,000,000 now!
This is the result of the increased financing and awareness, but also the adoption of this system by patients.

In addition, a huge volume of patients that have been undiagnosed or untreated these past two years will arrive on the market in the midst of a health professional shortage. This means digital solutions will be all the more necessary to balance the supply and demand.

« Third year in a row and a continued success! Congratulations to Maryvonne Hiance and her team for organizing what has become a renowned European healthcare event. Dechert is proud to have been part of the HTID story from day one ».
Alain Decombe, Partner, Deputy Chair for Inernational Operations, Dechert LLP

How to have the right talent in our European companies?

Speakers: Elsy Boglioli, Stéphane Boissel, Arjun Goyal, Charbel Noble and Angela Spatharou

To watch the replay click here

Interview of Elsy Boglioli, CEO at Bio-up

Our roundtable was dedicated to the topic of attracting the right talent to our European biotechs. Over the past decade, it has been clear that Europe has failed to create a large number of leading Biotechs. Fortunately, there are companies like BioNTech, or ArgenX, which are exceptions to this statement, yet there are still too few of these. The key question is now how to ensure that more leading companies emerge in the coming decade.

Funding has been a key bottleneck mentioned frequently, with US or Chinese biotechs having access to larger funds and deeper pockets. However Talent may be even more critical.

Even with robust levels of funding, if you do not have the right people around the table on the leadership team to execute, you will not succeed, and so the key question for our speakers was: how do we make sure that we have these people in our European Biotechs?

Stephane Boissel, the CEO of SparingVision was with us. He is a great example of a European talent with US exposure. He was the CEO of a company in Europe, he sold it to a US company, moved to the US, joined the acquiring company for a few years and now came back to Europe. He has seen both sides of the ocean. He has also taken a company through an M&A process and then worked in a company with later stage compound. Since he joined, he has made multiple hires in order to build a top-notch leadership team at SparingVision. Stéphane shared with us that this was a key priority for him, and that he was fortunate enough to have a very supportive Board, ready to invest in top talent.

Charbel Noble, from Servier, expressed the pharma industry viewpoint. He pointed out that the biotech ecosystem is lucky to be very attractive today. While the Pharma industry is facing retention issues Biotechs in Europe can not only recruit but also retain staff thanks to equity-based compensation, which larger companies have trouble matching. Now is the time to build on this attractiveness to constitute great teams.

Arjun Goyal, co-founder of Vida Ventures was also with us to share the US investors perspective. He encouraged European entrepreneurs to be ambitious, both in terms of team build-up and fundraising, with the latter funding the former. Arjun also insisted on the importance of talent for him as an investor, when assessing companies, especially when investing in complex fields where execution is known to be challenging.

Finally, we discussed the specific talent shortage in some areas, for example, the most technical ones like chemistry, manufacturing, and control or like manufacturing itself. Angela Spatharou who worked with the EIT Health Training Coalition, told us about the initiative being set up to make sure that we can attract young students to the health tech industry and train them to be successful in this industry, retain them and make sure that they continue to work in this sector, instead of moving to other sectors.

One closing thought: I found it very interesting and encouraging that we were all convinced of the paramount importance of talent to build successful companies. Being provocative one could say that talent today is probably even more important than science because there are a lot of teams with great science, but the global shortage is talent. The good news is that once this diagnosis is shared, CEOs and Boards can get to work to build great teams and thanks to new ways of working these teams can be global, even in European companies.

This event has been a great opportunity to reinforce partnerships of interest between the experienced and robust pharmaceuticals companies, the agile and creative biotechnology start-ups and the public actors of innovation. Our common goal to regain leadership and autonomy in innovative Health is very ambitious and the Leem is confident that the strong European dynamics that we could feel during HTID3 will help go one step forward" **Thomas Borel, Scientific Director, Leem**

Why investment in health is naturally ESG and even more?

Speakers: Christian Policard, Nissim Darvish, Ebba Lepage, Yannick Ouaknine, Glenn Rockman

This event has been very, very special because it took place at the end in the middle or at the beginning, we don't know, of the pandemic and this pandemic had consequences on many, many parameters for this industry and for this health sector.

At all levels, I would say at the level of development, at the level of collaboration, at the level of manufacturing, at the level of market access at the price level, this has been a real problem, it has given to the industry and the whole chain the need and the desire to change its old ways of working. It has allowed a serial collaboration between small and large companies, it has accelerated transfer between innovative small biotech's and large industrial company, even it has organized collaboration between former competitors.
It has helped companies to accept the transfer of their manufacturing plant to developing countries and authorize them to use different pricing strategy according to their economic level.

So, it's a big change and I will give you a few examples, perhaps two, one in the diagnostic sector and one the vaccine sector.
For the HIV diagnostic test, it took us 18 months to develop it and we did not lose one minute. We were only two companies, one American and one French to develop it.

If now you consider what happened for the COVID test, it took only six months! You had 80 companies working worldwide, even in developing countries or in many countries as China, which were not even existing in this sector before.

«Bpifrance was delighted to be able to sponsor the 3rd edition of HTID again. As a central public actor of the ecosystem, our goal is to strengthen the links between pharmaceutical companies, investors, public actors and startsups at the European level and the HTID is key event for this!" **Bpifrance**

Interview of Christian Policard, Fouding Partner, Biotech Développement Conseils

For vaccine it the same, I've been involved in leading the team to develop the Hepatitis B vaccine. It took us five years and, we were only two or three companies to develop it, it was in 1986. For the COVID vaccine, since the beginning, between 15 and 20 companies were challenging each other, and today I don't even know how much there are. There are perhaps three times more and at different development stage and, you have already 10 or 12 vaccines in the market with different qualities and this has been achieved in less than one year, because you know Moderna, for example, started in February 2020, began its first clinical trial in July and have been approved at the end of the year or the beginning of this year.
And that's why I think that this pandemic will have had very, very positive consequences.

The world after will be different from the world before and if it is applied to all the different medical sectors, it will be a fantastic help and I would say a support for further treatment of new diseases and it's really a lesson to learn and a very, very important factor as it has been acknowledged all along the discussions we had. We definitively perceived the influence of those facts which will change the mindset of the whole pharma industry.

To conclude, we can say that all these changes will influence the selection criteria of financiers for investors and the partnership criteria for industrialists.

Speakers presentation

Christian Policard, *Founding Partner, Biotech développement Conseils (moderator)*
Nissim Darvish, *Managing General Partner, MeOHR Ventures*
Ebba Lepage, *Executive Vice President, Group Head of Corporate Sustainability, Lombard Odier Group*
Yannick Ouaknine, *Director, Head of Sustainability Research at Société Générale Corporate & Investment Banking*
Glenn Rockman, *Founder and Managing Partner, Adjuvant Capital*

Tomorrow's technological challenges for healthtech companies

Industrial Redevelopment in Europe: Where to start?

Speakers: Cédric Volanti, Jérome Fabiano, Marc Dechamps, Philippe Luscan, Philippe Lamoureux & Klaus Beetz

To watch the replay click here

Interviews of Cédric Volanti (on the right) Vice President - General Manager Pharma Service Group , Thermo Fisher Scientific & Marc Dechamps, President of the Board, CEBR & International Representation, BioWin (left)

MD: The objective for this session was really to look at the bio manufacturing space in Europe in the context of what the European Commission is expecting a strong biomanufaturing ecosystem in Europe, ensure autonomy and sovereignity and able provide an EU resilience outside the pandemic and, also in case of pandemic.
This is what the Council of European BioRegions together with EIT Health and EIT Manufacturing, described.
We perfomed a landscape analysis of the biomanufacturing in Europe to better understand what we were speaking about.
Today we are presenting the first part of the report which includes countries like France, Spain, Germany, the Netherlands, Belgium, and Scandic countries.
We were focusing on the three main elements: On one hand, how can we stimulate innovation in Europe in the field of bio processing and bio manufacturing? Is it something which is strongly supported from a financial perspective? On the other hand what about the talent development?

Do we generate enough talent for the fast development of the bio manufacturing in Europe, this is an industry which is supposed to have a very strong growth in the near future and, not only because of the pandemic COVID-19, but also thanks to the rapid development of the bio medication.
Today, 4 out of 10 products are biomedicines and, we know that it might double in a very short period of time.
Definitively there is a stretch on the bio manufacturing industry in Europe today for different reasons, but talent is one of them.
The question is « how can we deliver it ?»
Making sure that our own CMO's or CDMOS companies, starting to produce on behalf of developers of biomedicine, we'll be able to finance their scaling up.
We'll be able to get a sufficient level of financing in order to meet the objective of the European Commission which is to build this EU biomanufaturing industry.
We all also acknowledge the importance of the foreign investment in that field, but we need at the end of the day a real balance to make sure that Europe is developing programs and tools, including financials tools, to support this scale up of young companies in the field of CDMOS.

CV: from an industrial perspective biomanufacturing is an important component of the biopharmaceutical ecosystem in Europe.
To be a leading region in biomedicine, we need to develop strong biomanufacturing centers. For start-up, it's generally way too expensive to do their own manufacturing and relying on industrial expertise is a must.

Biomanufacturing should be perceive as a strategic investment that Europe needs to sustain the growth of Biopharmaceuticals.
It could be an important contributor in the re-industrialization of Europe . It's a lot of jobs and added value that will remain in the region.
Biomanufacturing as an industry, requires educated and non-educated employees. As such we can play a role in the reconversion of workers of "old industry" and reduce unemployment but States and Regions should provide an active support in training and education.

«HTID 3 event was an informative and engaging event, connecting Biotech, Biopharma, Venture Capital and Institutions to bring innovative therapies to patients. This event supported our Thermo Fisher Scientific mission to enable our customers to make the world healthier, cleaner and safer. It allowed us to get closer to the biotech ecosystems, to confirm our understanding of current and future market needs, and to validate how we can better support them across all phases of their drug development journey.» **Philippe Gaudin, Director Business Development, Corporate Accounts, Country Commercial Leader France, Life Sciences Solutions, Thermo Fisher Scientific**

Developing disruptive robotic solutions: risks and opportunities

Speakers: David Caumartin, Philippe Bencteux, Jeffery Alvarez, Joana Cartocci, Stéphane Lavallée

To watch the replay click here

We had a roundtable about robotics development across the world with four great testimonials from various leaders, founders of companies and pioneers of this field, from Europe and the US.

Robotic Start-ups, never fail.

There is a wonderful appetite for corporations to invest into robotics and help the start-ups to develop their technology and their value creation.

Companies have realized the lack of robotic system expertise worldwide. The most recent machine learning and sophisticated adaptive artificial intelligence algorithm, we are able to take them to the best experts in the world.

What we've heard today shows that we have, of course, a lot of challenges. We start with an amazing idea, a transforming technology such as, this implantable mini robotic system that goes into the brain, launching and pounding drugs.

And those technologies struggle to be developed, to be adopted, to cope with the MDR (Medical Device Reporting) or the FDA (Food and Drug Administration) regulations. They need to understand what the right business model is and how to apply it.

I think HTID (HealthTech Innovation Days) is a key milestone because it helps to show the enthusiasm and values that share creators of long-term care systems and future healthcare providers.

It also emphasizes the need for such events, because clearly all of us have said that the best market is still in the United States and the best financing still in the US.

We have these wonderful talents in Europe and in France particularly. In robotics and A.I. fields the best robotics engineer headquarters will remain in France and Europe. But, with A.I. being developed close to the market, the second iteration will go to the United States or China.

So I sincerely thank Maryvonne Hiance and all the people of HTID. We have a duty to help robotic founders to accelerate their development by finding better financing for early and growth phases. To make sure that the doctors are also involved in this so that they are educated in the value creation. So that they are not afraid of the early phase.

Interviews of David Caumartin, CEO, Theraclion

So that they are not afraid of the reimbursement issues. So they know that it takes time. And so they take time also to help us develop these new technologies.

I'm an optimistic by nature, I want to believe that you already know that all the financing avenues in Europe are difficult. On Euronext there is clearly a problem with the valuation of robotic systems solutions in Europe. That will change over time, but I don't think we can't do it alone.

I think just like in rugby, that it's a scrum effect. We need to group. We need to push together in the same direction to go forward and gain the competitive advantage. Together we can create, protect and preserve disruptive technologies, born in France or Europe and growing expanding multiplying in our old continent that can transform itself as the startup continent.

"BNP Paribas was delighted to sponsor HTID for the 3rd year in a row, and to see the European medtech and biotech ecosystem further gain in importance and traction as evidenced by the excellent turnout and the strong institutional support. As a banking partner fully committed to this sector we will take pride in continuing to back innovation in healthcare and to accompany our clients in the success of their projects through financing, investment and advisory services." **Nathalie Grimbert, Vice President, Innovative clients & Zahid Mooner, Managing Director, Investment Banking, Head of Healthcare, BNP Paribas CIB.**

Deployment of AI technologies to better serve patients

Speakers: Helene Viatge, Isma Benattia, Celia Maury and James Somauroo

To watch the replay click here

Interview of Isma Benattia, VP R&D Strategy & Business Operations, Amgen

Our round table was dedicated on the use of artificial intelligence to better serve patients. The question here is, how can you use artificial intelligence and in fact machine learning to better serve patients. Let me take you through a few things.

First, let's analyze the health care ecosystem. We see technology trends.
An excellent example through this COVID crisis we have seen an accelerated adoption of telemedicine. This experience demonstrated the ability for patients and physicians, health authorities to adapt rapidly to change.

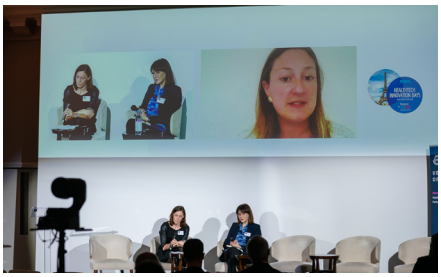
Why it's important to address and to have this debate today?
We're talking again about an ecosystem with different players. The regulators, the decision makers and the payers. They need also to update the regulations add new standards of ethics, quality, compliance .When we talk about artificial intelligence and machine learning, we talk about managing human data for diagnosis treatment ....
Human data comes from genomic data, clinical trial data, electronic medical records, therefore you want to ensure that you're also protecting individual privacy. So, there is an urgency from the authorities to update the regulation.

The other aspect to consider when using AI to serve patients is the role of the machine. Is the machine going to replace the human? The answer it is not. AI will be used by physicians facilitate the with diagnosis and treatment outcomes.
AI will also improve productivity, if today we need three days to make a diagnosis it could take only one tomorrow . You can you imagine the time savings thus cost savings.
The savings are could also come labs and imaging interpretation accuracy, reducing the human bias thus reducing the risk of misdiagnosis.
It will largely benefit the patients allowing better outcomes. It will also result in important saving in health care systems. We know the many challenges they face today such as increasing costs.

There is another dimension to consider. There are several studies have shown that staff job satisfaction, especially in labs, increased when technology is traduced, including AI.
You free up time for the scientists to take care of patients, which they value a lot.
Regarding AI in the pharma industry, the challenge is the amount of data, still in silos therefore not immediately accessible to scientific.

If AI is optimized you could significantly accelerate discovery with new targets better understand diseases natural evolution and select the right sub group of patients in clinical trials. It could also help in pharmacovigilance with signal detection and better understand the safety profile of a product.
The possibilities are endless, but we still have a long way to in this journey.

This transformation is not an if. It is a when...I strong believe is will accelerate globally within the next 5 to 10 years.
To conclude, I don't think the machine will replace the human in healthcare but the machine will "augment" physician capabilities which will results in better patients outcomes.



« Amgen is since the beginning of the HTID a long-term partner, committed to bring to this ecosystem event our vision about key topics that will impact tomorrow's health and serve patients.
Looking ahead, Amgen is renewing its commitment to future editions in order to contribute to the reputation and success of this unique event in Europe. »
Corinne Blachier-Poisson, VP Manager, Amgen France

Tomorrow's public health therapeutic challenges: infectious diseases, antibiotic resistance, cancer.

Clinical research as a care option and an added value for innovative companies

Speakers: Karine Samama, Kathrin Adlkofer, Elena Coluccelli, Victoria DiBiaso

To watch the replay click here

Interview of Karine Samama, Healthcare and lifescience strategy director, Microsoft

Clinical trials are probably the most painful and costly process in the Pharma industry. Within the last decade, Clinical trials have become more complex,

- It takes now circa 3 billion dollars to develop a drug from pre-clinical to commercialization with a composite success rate for clinical phases of ~11% depending on the therapeutical area.

- Phase III protocols contain 60% more procedures than they did at the start of the millennium.

- Patient enrollment and retention represents a real pain point, studies show that up to 86% of clinical trials miss their recruitment timeline delaying further time-to-market

At Microsoft we see significant increase in the efficiency and effectiveness of the next wave of clinical trials, thanks to the emergence of improved technologies, access to real-time clinical data and new use cases. We are thrilled to partner with companies such as EPAM, Veradigm, CROs and biopharma focusing on areas such as :

- Digitizing the study: establishing an end-to end-flow of data from study objectives through study reporting.

- Adaptative trials and maximizing the value of study data: making high quality data accessible and enriching it through artificial intelligence.

- Meeting patient needs as research modernizes, ensuring that clinical research is a viable option for patients that can benefit, and ensuring that study participants needs are met during and after the study

As part of clinical research as a care option, decentralized clinical trials (DCTs) enabled by digital health technologies offer new opportunities to improve diversity and Inclusion.

These trials can expand care to minority groups and improve our science by utilizing technology in mobile and connected health platforms. Patient-centered connected devices are key here e.g. wearables, nanotech, XR, virtual assistants, bots and more) can be used to accurately and efficiently capture measurements during virtual appointments.

The wide-spread adoption and use of virtual communication is already facilitating remote interactions between clinicians and their patients, we are also seeing growth of Home-delivery technologies – such as cold chain, 3D printing for medical devices and medicines up to the use of delivery drones – which will allow direct-to-patient distribution of trial materials that would previously have been given to patients during traditional clinic visits

With the coming of age of DCTs, patients can get the care they need at home right at their fingertips. Doing so can ensure that, regardless of where a patient sits, their socioeconomic status, gender, or ethnicity, they can participate in a clinical trial from anywhere. This lowers the barriers of entry and ensures everyone has access to the best possible care.

"It has been a real pleasure and honor to support the HTID3. The HTIDs successfully bring the health ecosystem together; healthtech, biotechs, Investors and Corporates, driving innovation to deliver more value, we remain committed to help transform & re-imagine healthcare and lifesciences and are looking forward to the next HTID4"

Karine Samama, Healthcare & lifescience | strategy director, Microsoft France

Life sciences cluster efficiency

Speakers: Alain Herrera, Maria Souleau, Fabrice André, Olivier Bogillot, Johannes Fruehauf and Jérôme Van Biervliet

To watch the replay click here

Interviews of Fabrice André, Head of Research, Gustave Roussy Institute, Villejuif

During the HTID session dedicated to life sciences cluster, we introduced with Olivier Bogillot, the president of Sanofi France, the Paris-Saclay cancer cluster that is a project that was publicly disclosed by the President, Emmanuel Macron in June 2021.

So, what is the rationale and the gap we would like to fill?

The Paris area has been ranked among the best areas in the world for the basic science and clinical research in oncology as assessed by the number of publications.

Also, it has been ranked well for the number of patents in this field of cancer research.

So, the first pillar of the project is to be able to propose solution for startups to grow in the field of cancer research.

The second pillar is multiple observations published in many journals and includes science that companies can develop better if they are inside an ecosystem and if there are some academic research centers inside this ecosystem. It is what we call the ecosystem, the need to put everyone on the same place to synergize.

The last pillar for the development of the project is the observation that more and more cancer research is led by translational research that aims at making discoveries from the analysis of patient samples.

What is the project?

The project is to offer companies like startup but also mid-size or large-size companies the capacity to develop translational research in the field of oncology beyond only one door.

What we mean by beyond only one door is that when a company will come with an academic partner to develop a translational research project the company and the academic partner will find all the services inside this cluster.

So, there are two goals for this cluster.

First is to perform translational research projects to model cancer and propose personalized therapies and second to allow some startups to grow and potentially to become a large size company.

The project has five funders: the University Paris-Saclay, the Institut Polytechnique, INSERM, Sanofi and the Institut Gustave-Roussy.

The project is going to create a legal entity, this entity is going to create services.

Among these services, we have first a building to offer space for the project, second, we have biotechnology platforms to profile samples, third we have the capacity to analyze data thanks to the contribution of the Université Paris-Saclay and of the Institut Polytechnique both being experts in applied mathematics.

We will offer expertise because it seems that for most of the startup companies just having access to the expertise, especially the medical expertise, is extremely difficult and is a major limiting factor.

We will develop a continuous education to train the ecosystem associated with this cluster.

And we will try to develop an investment fund to support some project.

Of course, any project from anywhere in France, Europe, or even the world can enter in the cluster and the aim is really to locate in one place many very high-level translational research project that will further allow startup companies to grow.

It's really the model of the flagship project, when one startup company has a flagship project what the company cannot do because it's too complex, we are supposed to address and solve this issue.

What about the timelines?

We are supposed to start the first centric project before end of 2021.

We expect to have a managing director to be hired before end of the year and to have the first legal entity to be created before end of the year.

Then we will have two to three years with a temporary structure. After 2025, we expect to have a building specifically dedicated to this cluster and the expectation will be of course that the building and the activities have a leverage effect that will allow incubators or bigger companies to relocate around this place.

The idea is to have a totem that will then attract in the surrounding area startup companies, big Pharmas, emerging companies or companies involved in biotechnology and the aim already is to perform overall 100 research projects in the next 10 years.

"Over the past months, we all have witnessed how innovation can arise when large companies, start-ups, academics team up to solve problems. Sanofi is convinced that innovation can only change lives if these worlds meet and collaborate. During this new edition of HTID, Sanofi was present to share its knowledge, and to promote great science and technology." **Sanofi**

Optimizing the policy environment to accelerate time to market for innovation to patients

Speakers: Erik Tambuyzer, Christina Rangemark Akerman, Simone Boselli, Anaïs Le Corvec and Leen Thielemans

To watch the replay click here

Interview of Erik Tambuyzer, Innovator in human healthcare

For this session, participation by the different stakeholders, including patients' organizations has been of prime importance: 2 speakers represented Patients' Organizations with the authorities being represented by a former member of the board of the European Medicines Agency (EMA), currently of EIT Health, and industry represented by a speaker from a small company developing its first medicine.

The session started with Erik providing a summary of a session at HTFP (Health Tech for Patients) organized by HealthTech For Care, in June of this year that he moderated. It has been concluded there that data have become bottlenecks in developing new innovative treatments, especially for rare diseases. Another conclusion was that apart from a collaborative dialogue, we need to cultivate a digital culture because only by creating networks and by digitalization of collected data, sufficient data for innovation development will be generated in the future. A draft report of the Friends of Europe 'Building a path for rare diseases in the European Health Data Space' also underlines this aspect.

The HTFP session also made clear that the role of patients' organizations is crucial. These organizations need adequate financing to achieve the many things expected of them. Up to this point, they are mostly underfinanced, so a more in-depth look at the potential for more financial support is required.

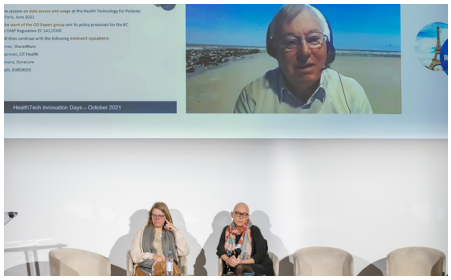
A second theme has been a discussion of the currently ongoing Revision of the Orphan Medicinal Products Regulation EC 141/2000 by the European Commission. Erik reported on the work of the European Orphan Drug Expert Group (https://od-expertgroup.eu/od-expert-group-recommendations/) of which also Simone Boselli is a member. The expert perspectives were brought together in this report, and formulated in policy recommendations. Some of these recommendations would be possible within the current regulatory framework while others require a broader policy agenda. EU policy makers are called upon to commit to such broader agenda. Participants were invited to join in support of the policy recommendations and this approach.

The first speaker of the session, Anais Le Corvec of Share4Rare discussed different ways of innovating in the area of research, stressing the point on the one hand, of the need to create a rare disease community as a framework and on the other hand, of satisfying the need for digital data, e.g. by using wearables and apps, for the generation of a data package to be used by artificial intelligence to complement existing real-world data.

The second speaker, Christina Akerman, representing EIT Health, highlighted that the use of such real-world health outcomes matters most for patients. She also stressed the importance of EMA scientific advice and regular contacts between developers and regulators to ensure that development follows the right pathway, with no money and time wasted and avoiding burden for patients without results.

The third speaker, Leen Thielemans from the company Dynacure highligthed how small companies face challenges in developing treatments for diseases for which no current therapies exist. Such pioneering work creates many challenges, and Leen underlined that very early collaboration with patients' groups is of extreme importance to succeed in such mission.

The last speaker was Simone Boselli of EURORDIS. Simone talked about the need for an innovative and inclusive eco-system to supplement the current Orphan Medicines Regulation to solve the issue that 69% of rare disease patients only have symptomatic treatment with only 5% having curative treatment and 3 % preventative treatment, resulting in 31% having NO treatment at all. There is still a lot of work to be done, and that is why this session was organized and why we tried to offer insights to move forward in solving some of the issues.



« HTID3 was an outstanding event, with high-level participants and carrying a strong and positive message for the Health-tech ecosystem". **Caroline de Mareuil-Villette & Claire Verschelde, Founding Partner, ICOSA**

Infectious diseases: emerging challenges in the pandemic era

Speakers : Florence Séjourné, Marc Le Bozec , Rafael Canton Moreno, Inga Fröding, Jean Lang, Milovan Stankov-Pugès and Gérald Ulrich

To watch the replay click here

Interview of Florence Séjourné, CEO, DA VOLTERRA & President at BEAM Alliance

I am the CEO of DA VOLTERRA, a Paris-based company developing first-in-class therapies to protect intestinal microbiome from antibiotic and chemotherapy-induced dysbiosis in cancer patients. I am also the founder and president of the BEAM Alliance, a non-profit association regrouping European Biotech companies innovating in antimicrobial resistance (AMR) in order to speak with one voice in discussions with worldwide stakeholders.

I first wanted to remind the audience of the infectious disease risk level established in "Global Risk report" published each year by the World Economic Forum in Davos. In 2006, the "risk of pandemic infection" was first listed; in 2013, the "need for action in antimicrobial resistance" was ranked within the list of the top 20 risks; obviously, the COVID-19 crisis brought the infectious risk on top of the list in 2021: awareness of infectious risks is therefore not a question anymore! However, the gained experience does not seem to translate into better preparedness ability yet.
AMR is still growing, and its market is still broken.
New incentives are absolutely required to support innovation towards new antibiotics and other curative and preventive strategies such as antibodies, vaccines, phages, microbiome protectors, diagnostics etc. Nevertheless, the newly created HERA agency and the willingness to revise the EU pharmaceutical legislation are grounds for hope in Europe.

A matter of hope also arose from our collective capacity of adaptation, impressively demonstrated during this pandemic crisis. Government bodies, citizens and physicians completely changed their daily life; pharmaceutical/biotech/diagnostic companies have provided solutions in remarkable short R&D timelines; regulators adjusted their expectations and processes to accelerate product paths to market and payers their contracting modalities to make sure vaccines and diagnostic test could be available for patients so fast.

It was therefore a great pleasure for me to moderate this roundtable with public and private experts from various horizons.
Two CEOs of the diagnostic companies, NG Biotech and QuantaMatrix, first explained how the COVID-boom of diagnostics stimulated their activities, demonstrating things could be done differently and faster. Both really insisted on the need for rapid diagnostic tests to tackle ID, with accelerated regulatory and market access procedures. That was well in line with the introduction by Rafael Canton from Madrid University, who stressed out the importance of lab detection and rapidity of testing. The COVID revolution should now fuel the fight against AMR and other viral pathogens.

Marc Le Bozec, from Financière Arbevel, was involved in the NG Biotech experience. As one of those few investors in the field of rapid infectious diagnostic tests, he explained the rationale supporting his investment decision, and confirmed that the future fund that Arbevel is setting up will keep infectious disease as a field of investments. A truly interesting success story and an encouraging signal to witness the come-back of investors.

From the Big Pharma perspective, Jean Lang, from Sanofi Pasteur, insisted on the new technological opportunities brought by mRNA, and the great lessons learned when gathering public and private stakeholders altogether, bringing innovation so fast to patients in a win-win collective manner.

As a wrap-up, Inga Fröding (Karolinska Institute) delivered the key message of this roundtable: "global problems need global solutions ". We did it with the COVID pandemic, we need to do it for other needs, especially for AMR. From a clinician standpoint, she insisted on the needs for rapid tests, new vaccines and more widely new prevention products to control infection damages and spread. She insisted on the need for new business models that could turn AMR innovation profitable again. Radical political changes are required, such as the subscription models currently tested in Sweden and the UK. To fully tackle the AMR public health issue, such mechanisms should both promote innovation towards new antimicrobials and guarantee access to old ones.

To conclude this very enjoyable roundtable, I would say that the COVID-19 pandemic clearly brought new paradigms around anti-infective disease management. It is now of the utmost importance that these lessons learned are turned into concrete and actionable measures in the revised EU pharmaceutical legislation and in the effective implementation of HERA. Only then, could we see Europe at the forefront of preparedness against the upcoming AMR pandemic.

« After its third edition, the HTID has established itself as a major conference in Europe for innovative companies in the health sector. It is a unique moment for investors to meet a large number of innovative European companies. Invest Securities as an important player in the healthcare capital market will continue to support HTID."
Jean-Emmanuel Vernay, CEO of Invest Securities

How are disruptive technologies transforming the oncology landscape to fulfill patients' unmet needs?

Speakers : Patrick Therasse, Jean-Yves Blay, Eric Halioua, Pierre Leurent, Anne-Laure Morel

To watch the replay click here

Interview of Patrick Therasse, Vice President, Late Stage and Life Cycle Management Oncology, Servier

The session was dedicated to an important aspect in the management of cancer treatment. The idea was to put some light on alternative technologies that can contribute to improving cancer treatment on top of what we typically see with conventional drugs and biologics. Professor Jean-Yves Blay introduced the session with a broad overview of unmet medical needs in oncology in 2021.

The organizers had invited 3 companies with quite different profile to share with the audience their work as alternative (or complementary) technologies aimed to answer specific unmet patients' needs in oncology.

We first heard about Voluntis, a company that has developed a tool based on artificial intelligence to help patients to manage their treatment. Interestingly, the tool specifically help monitoring the safety aspects of their treatment, and possibly modulate the treatment in real time and customized it according to their tolerance.

This company is now partnering with many other big pharmas interested in the tool, but also with some cancer patients network which contributed to develop the tool and make it available to a widest cancer community.

Torskal is another very interesting company developing a nanoparticle based medical device. It's labelled as a medical device because this is how it is classified by regulatory authorities but, actually this is actually a solution of "green" nanoparticles serving as local thermosensitizer for laser therapy. I call them green because these nanoparticles are extracted from natural products and manufactured through natural chemico-physical reactions. These nanoparticles are then used to treat specific skin cancers such as basal cell carcinoma or squamous skin carcinoma and in the future melanoma as well. These nanoparticles are injected locally in cancer tissues and then are being activated externally by phototherapy to kill the cancer cells very specifically.

This company, which is a French based company, is trying to generate interest from investors to help them developing this technology in France certainly, but as well beyond the French perimeter.

The 3rd company company presenting was PDC'Line, a French-Belgian company, interested in immune-oncology. This company is a developing cancer vaccines platform using Plasmacitoid Dentric Cells as a carrier of cancer antigen to generate a specific anticancer immune response.

This platform is based on memory immune cells that are contributing to the immune control of cancers, and the company is now trying to customize these cells to target specifically cancers. They are in early-stage clinical development and seem to move well in this preliminary stage of the clinical testing phase.

So, 3 companies with very different profiles and cancer treatment approaches which are certainly complementary to what is being done by the majors.

Indeed, I think no major pharma companies will ever look into ways to improve the healing outcome of treating non-melanoma skin cancers. Certainly there are very few companies which are interested to look into how to help patients with the tolerance management of their treatment in real time. Finally, we now know the that our immune system can be very efficient to control cancer but there are a lot of opportunities for improvement and we definitively need many more shoot on goals to discover other winners.

All those companies are addressing high unmet medical needs as cancer treatments can be very toxic, mutilating or simply inefficient to prevent recurrence.

It is absolutely necessary to have small companies and start-up engaging into the discovery and development of alternative approaches for cancer treatment, some of them for sure will be successful and will propose a novel treatment approach that could make potentially a big difference. Any attempt to improve cancer care will inevitably contribute to progress even though not all attempts will be successful.

So, interviewing these companies, I could sense the passion for what they do behind their work and as expected their daily challenges are quite different. One of them is facing the problem of raising interest of investors to help them finance their path into the clinic, another is in the waiting room until they reach clinical proof of concept with the front runner drug candidate, while the last one is actually much more advanced and investigating US market expansion of the tool.

Very interestingly, 2 of these companies are addressing problems that may look more relevant for patients than for treating physicians (improving the healing process after treatment and tolerance of cancer treatment).

My advice to all of them is indeed to intensify their contacts with patients' organizations as those may provide help in various dimensions (network, finance, understanding patients needs...) .

Overall, it was a very interesting discussion and I would like to thank all contributors for sharing their work with us. I hope it also provided the audience with an alternative perspective on "non-conventional" approaches to respond to unmet medical needs for cancer patients.

"Open innovation and partnerships are key to accelerate the development of therapeutic solutions for patients; this is why Servier has supported HTID as a long-term partner since the very beginning. This 3rd edition was a true success for the European healthcare ecosystem and we look forward to the next edition!" **Eric Falcand, Global Head of Business Development, Servier**

How EU could benefit from US set-up to improve the innovation in HealthTech?

Speakers : Pierre Courteille, Gabriela Apiou, Richard Smith, Juan J. Pablo

To watch the replay click here

Interview of Gabriela Apiou, PhD, Director of Strategic Alliances, Mass General Research Institute and Assistant Professor of Dermatology, Harvard Medical School

The question about improving innovation in the healthcare space is fundamental and one that we, in the field of translational sciences, need to address for a very important reason – the healthcare challenges we are facing are big and complex.

This is a great conference where we come together internationally to find a common mission and to tag together these problems. And although our roundtable was about how Europe would benefit from US, I know from experience in academia, both in Europe and US, and industry in Europe that this is a two-way street. We can learn from both systems and we should aim to build a better one together.

Joining me were Juan de Pablo from the University of Chicago and Richard Smith from McDermott and Emery law firm. Pierre Courteille from Abivax moderated our discussion. I think it was a great mix of different perspectives – how we innovate in universities, academic medical centers, and biopharmaceutical companies, and how we transfer this innovation to patient care and market.

We addressed questions such as the efficiency of the US innovation ecosystem, technology transfer management and risk management.
Juan described and highlighted the importance of efficient mechanisms that enable discoveries made in the university labs to reach the market as soon as possible to benefit society. I talked about the need for basic scientists, translational researchers, and clinicians in academic medical centers to come together with their peers in the biopharmaceutical industry to develop novel solutions to major healthcare challenges. We both acknowledged the cultural shift that needs to happen.

I shared our experience with the new model of innovation through collaboration across academia and industry that we created and successfully piloted over the last six years. Eight teams focusing on specific healthcare challenges and bringing together more than 250 scientists across the institution came together, integrated science, articulated cohesive research plans informed by commercialization colleagues, and engaged the dialogue with industry peers to identify the common ground for relevant collaborations. The educational program bringing together more than 50 teaching faculty, leaders from academia and biopharmaceutical industry made this endeavor even more efficient by teaching faculty the importance of collaborating internally and with industry, the common language, and what it really takes to translate a new idea from the lab into a new diagnostic or therapeutic. Regarding technology transfer timeline, Juan, Richard, and I agreed that it depends on the technology. I also pointed out that it takes many years of research and preparation before discussions with a commercial partner begin.

On the topic of incentives, in terms of the efficiency of the US system, Richard spoke to how the US legislation is set up to encourage royalty's income sharing between inventors. As an example, Juan and I confirmed that in our institutions, royalty's income is shared between the department, the lab, and the inventors. I think this is a very powerful incentive, but in an academic medical center secondary to finding solutions to our patients' problems.

Further we talked about how differently we take risks in the US compared to Europe. The competition here is very active and we need to be creative and take risks. We need to figure out what is relevant, what is valuable, and we constantly compete for funding to support new ideas. Failure is part of the process.

In the end, I hope our discussions are inspiring the European ecosystem and hopefully some of our best practices will be piloted there. I also look forward to resuming our dialogue so we can continue to learn from each other and move forward.

It was a real pleasure for McDermott to sponsor the third edition of the HealthTech Innovation Days organized by HealthTech For Care and EIT Health. We were delighted to be part of this successful event which further strengthens the role of Europe in healthcare innovation." **McDermott Will & Emery**

Europe as a driver of patient-centered innovation

Speaker: Philippe Lopes-Fernandes

To watch the replay click here

Interview of Philippe Lopes-Fernandes, Executive Vice-President, Chief Business Officer, Ipsen

At Ipsen we want to play a role in showcasing and driving the innovation from France and Europe on the global stage. In 2020 biotech and pharma deals soared to an all-time high of 1,154 deals worth $146.3 billion. This represents a 23% increase in activity and 31% increase in the value of these deals compared to 2019. The pandemic has not stifled our progress.

I am personally excited about Europe's role in driving innovation, and in France especially. There is great science in France and it is something we should be proud of. A significant number of emerging companies have been created based on quality innovation from public research. France-Biotech lists more than 1,700 start-ups, with more than 300 members in 2020. But we are competing with markets like the US and China that put an incredible amount of public and private resources in play and make competition very difficult.

A key message during my presentation at HTID was to make sure we are excited the directives announced by President Macron in July from the work of the CSIS. With ambitious goals we can bring as many programs as possible into clinical development and eventually to patients.

We know many groups face challenges and need additional resources and more funding. The path is tough, especially in Pharma and Biotech – we see that. The needs are enormous, but with these announcements, there are more resources than there's ever been. We must now focus on the resources we do have, acknowledging they are never enough and find the smartest way to utilise these, to bring solutions to patients.

Recently I had the pleasure to moderate an exchange with Stephane Bancel, the CEO of Moderna, at an event in Ipsen's US offices, hosted by French Tech Boston. I pushed Stephane to share what kept him awake at night this past year and he was quick to explain that he shares the same fears as all leaders of biotech companies about not having enough funding to support development, manufacturing and commercialization. It seems we all have the same things keeping us up at night !

At Ipsen we remain committed to boosting the French ecosystem for healthcare innovation. We are investing in French and European biotechs and are proud to put all possible efforts to bring the innovations coming from these biotechs to benefit patients. But for all of us within this ecosystem, we are equally responsible and have a part to play in achieving this. We should be ambitious, we should not fear the competition because the science and the innovation available in France is tremendous.

"Alpha Blue Ocean, an alternative investment firm focused on flexible financing solutions for publicly listed entities, is extremely proud to have sponsored the third edition of the HealthTech Innovation Days conference. The event allowed Alpha Blue Ocean to engage with a multitude of potential clients, seeking financing to deliver on their growth strategy, and represented an important opportunity for us to build on our collaboration with the European Healthcare sector. We will always accompany our clients as partners and keep financing innovation in Europe." **Rajae El Antari, PR & Marketing officer, Alpha Blue Ocean**

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Already involved for HTID4: Our long-term partners

With Amgen Innovations, we are strengthening our commitment to healthcare and research players in France. Concretely, we act as a catalyst around three key actions that structure this unprecedented programme: to undertake partnerships with start-ups to reinvent the health path, to support calls for research projects to discover the therapeutic innovations of tomorrow and to strengthen our support. to caregivers facing the challenges of their profession. Associating biological and technological progress with human and social sciences opens up the field of possibilities. Convinced of the richness of the French ecosystem in terms of innovation, through Amgen Innovations, we wish to contribute to the emergence of healthcare solutions that have meaning for patients and healthcare professionals.

BNP Paribas is the European Union's leading bank in terms of revenues and key player in international banking.
The Group supports all its customers (individuals, associations, entrepreneurs, SMEs and institutions) in the success of their projects through its financing, investment, savings and protection solutions. BNP Paribas holds key positions in its three operating divisions:

- Retail Banking division brings together all of the Group's retail activities and specialised business lines;
- Investment & Protection Services includes specialised businesses offering a wide range of savings, investment and protection services,
- Corporate & Institutional Banking division offers tailored financial solutions for corporate and institutional clients, including capital markets issuance, financing, risk management and hedging. By matching the financing needs of companies with the investment opportunities sought by institutional investors, its financial solutions create value while contributing to the financing of the economy.

ICOSA is business-oriented European IP Law firm, dedicated to Healthcare (from Pharma to medical device and AI-related inventions), Food and Greentech.
With 45 employees, ICOSA is a lively and alert law firm, with high technical level and the following IP skills:

- Build-up IP Rights portfolios,
- Help in defining and implementing IP Strategies,
- Audit and Due Diligence in the framework of fund raising or acquisition,
- Bring IP intelligence and awareness to Investors and CEOs.

Invest Securities is an independent brokerage company with a complementary business unit including brokerage, equity research team and issuer services. We provide solutions adapted to companies, institutional investors as well as to fund managers.
Within Allinvest, Invest Securities benefits from the synergies of the finance company and is ranked as the leading listing sponsor on the Euronext and Euronext Growth markets.

Servier is a global pharmaceutical group governed by a Foundation. With a strong international presence in 150 countries and a total revenue of 4.7 billion euros in 2020, Servier employs 22,500 people worldwide.
Servier is an independent group that invests over 20% of its brand-name revenue in Research and Development every year. To accelerate therapeutic innovation for the benefit of patients, the Group is committed to open and collaborative innovation with academic partners, pharmaceutical groups, and biotech companies. It also integrates the patient's voice at the heart of its activities, from research to support beyond the pill.
A leader in cardiology, the ambition of the Servier Group is to become a renowned and innovative player in oncology. Its growth is based on a sustained commitment to cardiovascular and metabolic diseases, oncology, neuroscience and immuno-inflammatory diseases. To promote access to healthcare for all, the Servier Group also offers a range of quality generic drugs covering most pathologies.

Sofinnova Partners is a leading European venture capital firm in life sciences, specializing in healthcare and sustainability. Based in Paris, London and Milan, the firm brings together a team of professionals from all over the world with strong scientific, medical and business expertise. Sofinnova Partners is a hands-on company builder across the entire value chain of life sciences investments, from seed to later-stage. The firm actively partners with ambitious entrepreneurs as a lead or cornerstone investor to develop transformative innovations that have the potential to positively impact our collective future. Founded in 1972, Sofinnova Partners is a deeply-established venture capital firm in Europe, with 50 years of experience backing over 500 companies and creating market leaders around the globe. Today, Sofinnova Partners has over €2 billion under management.

This event set the scene for the next edition!

Replays of the round tables: https://htfc-eu.com/replay-htid3/

We are looking forward to seeing you in 2022!

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