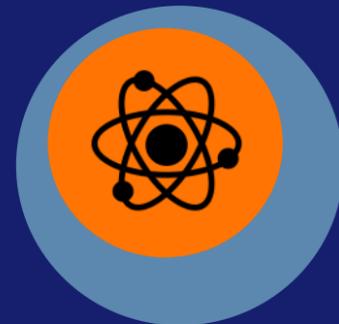


# CONTENT

- **The new BIOTechno AURA Team**  
Meet the new organizers for 2021!
- **Interview: a researcher at Novartis**  
We met with Dr Dominic Hoepfner, a lead researcher at Novartis. Discover what he has to tell to young scientists !
- **Hot Topic of the month**  
Open Access : free of charge for who ?
- **Calendar**  
Don't miss out on key events to network, share your work or learn !
- **BIOTechno's REAL favorites of the month**  
Our recommendations to **RE**ad, **A**nalyze and **L**isten !  
Discover the start-up CARBIOS !
- **JOIN US !**





## The BIOTechno AURA Team 2021

**ELODIE BILLARD**

I am passionate about science and more especially microbiology. I obtained a PhD in environmental microbiology at Université Grenoble Alpes, before teaching and doing now popularization of science. I discovered the BIOTechno AuRA team in 2019 and for the 2021 edition I am in charge of the communication and social media management. It's a great experience and a new challenge to develop my organization and communication skills.

**FAKOUROU CAMARA**

I am doing a PhD between the CEA and the DCM in Grenoble, on the development of new photocatalytic systems for the reduction of protons into dihydrogen. I am very glad to participate in the BIOTechno forum which allows an exchange between companies and young PhD students/doctors/researchers to enable them to widen their network, or even find work, and for companies to increase their visibility. The BIOTechno forum is also a great opportunity to meet other scientists and expand one's personal network.

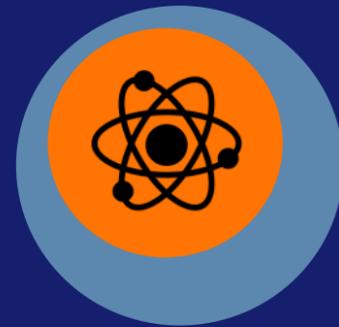
**LIES CHIKHAOUI**

I'm currently doing a PhD at ENS Lyon aiming to understand molecular mechanisms through which biological clocks function. I also got interested in applied research after experiences in start-up where I discovered how interesting and diversified a position could be in a private company. Being part of forum BIOTechno organisation brings several aspects such as communication, networking or management that are different from academia work and trying to maintain the link between people in this context is quite a nice challenge.

**IRIS LEMEUNIER**

I am 2nd year PhD Student working in the CEA Grenoble on wound healing delay observed in diabetic foot ulcer. I am interested in science in all its aspects and enjoy organizing events and communicating around it. Being part of the forum BIOTechno is a rewarding experience which enables me to meet and collaborate with other new scientists of this field. I hope our work will manage to help students to discover better the biotechno world and find their way into it.





## The BIOTechno AURA Team 2021

**KATIA LEFSIHANE**

I am currently carrying out a CIFRE PhD in partnership between the French Blood Establishment and INSERM, in order to develop a new therapeutic approach to address the problem of transplant rejection. Joining the biotechnology network is an opportunity to promote relations between academia and industry. It also allows me to discover the different career opportunities that could be offered to me in the future.

**NATHAN ROBERT**

Enthusiastic Health-engineer from Faculty of Pharmacy in Montpellier with focus on product marketing, project management and therapeutic education along with international and comparative knowledges on cannabinoids based health products, I am currently doing a specialized training with Paris-Saclay's university in using medical cannabis: the 1st French accredited training course dedicated to health professionals ! Highly grateful to be part of BIOTechno AuRA this year so that I can share information on the flourishing medical cannabis opportunities with young scientists from academia and thus connect them directly with industrial hemp leaders of tomorrow.

**LEA SZPIRO**

I did a bachelor's degree in microbiology followed by a master's degree in applied infectiology. After 1 year as a laboratory engineer in the field of decontamination, I started a Cifre Ph.D in this field. I am currently in the middle of my second year.

**YANIS ZEKRI**

I am currently in PhD at ENS Lyon on a two-sided project: a first one under the authority of a European Cluster to improve the identification and assessment of endocrine disruptors, a second one to determine and take advantage of the metabolic properties of thyroid hormones on energy expenditure. Taking part in the BIOTechno forum is a unique opportunity to bridge and reinforce the connection between academic students and private partners to broaden the work possibilities, career options and vocations of leaving school students.





Interview : a researcher at Novartis

## Dr Dominic Hoepfner

Dr. Hoepfner leads a research team and co-leads a platform at Novartis in Basel Switzerland. In his interview, he describes his academic and professional background before working at Novartis and walks us through a typical day at his job.

If you want to work in industry, Dr. Hoepfner will give you some advice concerning skills you need to develop to be the best candidate. He will also tell you how his specific job affects Novartis and the society in drug discovery.

You will learn how to talk science to non-scientists and not to get technical when explaining something you know.

We wrap up the interview with a message from Dr. Hoepfner to young scientists.

Find the [video of the interview](#) on our youtube channel



Scan this QR code and learn more about Novartis.



## Open Access : free of charge for who ?

By Aura MORENO VEGA

In September 2018, cOAlition S, a group of national research funders and European and international organizations/charitable foundations, proposed an initiative that was to “shock” the traditional publishing system: **researchers being funded by one of such members were required to publish their work in open-access journals or platforms** or make it available in open-access repositories. The aim was clear: eliminate journal price barriers and make scientific findings immediately shareable. A couple of years later, **Plan S was finally put a start on January 2021. But exactly how much is open access costing to make scientific findings “free”?**

Breaking the paywall barrier through open access has the obvious advantages of increasing the visibility and outreach of scientific findings, which could result in a more informed and connected scientific community. However, **whilst open access publication takes out the pay barrier for readers, it increases it for authors.** Indeed, the newly proposed fees to be charged for open-access publishing by major publishers come as a new barrier to many researchers. In order to compensate decreased revenues due to losses of subscription and to cover for article processing and publication costs, **publishers are charging authors to publish open access a median \$2,600.** Even more so, high-profile journals such as Nature and Cell Press are charging about \$11,600 (€9500). Whilst such fees may be affordable by some universities, there are other institutions in the world where the annual budget allocated to a research group for publication fees may not even cover the cost of publishing open access in a high-profile journal. **This could then dangerously result in only well-funded research groups being able to publish open access in high impact journals leaving early career scientists and scientists in the developing world out of the picture.**

Many argue that funders and institutions should pay such higher fees to help authors publish their findings in open-access journals. **However, there is still much debate on how to control publishing costs, and how to shift deeply rooted ways of judging the quality of a scientific research.** If many funding agencies continue to evaluate authors based on the publications of their work only in high-impact, costly journals, open-access publishing will not result in a real outreach of scientific findings.

Plan S is a great and ambitious initiative. It is helping to take down the pay barrier in scientific knowledge access, yet it still faces many other barriers to take down. So far, its members still represent a small fraction of funding agencies across the world, meaning that **more support would be needed in order to achieve a global change in scientific publication.**

Read more about the subject:

- Brainard J. (2021) “A new mandate highlights costs, benefits of making all scientific articles free to read”, *Science*
- Else H. (2020) “Ambitious open-access Plan S delayed to let research community adapt”, *Nature*
- Van Noorden (2013) “Open access: The true cost of science publishing”, *Nature*



## Calendar

March

1

### MOOC Biobanking – Institut Pasteur

**Date and time :** From 1<sup>st</sup> March to 5<sup>th</sup> May 2021

**Where :** FUN MOOC platform (French, English, Spanish) – [CLICK HERE](#)

This MOOC is aimed at undergraduate, graduate and PhD biology students, medical doctors, teachers, researchers and all those who want to learn what are biobanks and how they have to be managed. A good scientific background is recommended to follow this MOOC. The DISCOVERY path (videos/quizzes/forum) is free, the QUALIFYING path (with certification – final exam) is 150€.

March

11-12  
& 18-19

### Journées POLEPHARMA du Biotesting - webinar

**Date and time :** 11-12<sup>th</sup> and 18-19<sup>th</sup> March

**Fees 40€ for students, 60€ for academia without taxes ( In French) [CLICK HERE](#)**

Les Journées POLEPHARMA du Biotesting ont pour objectif de réunir plus de 200 décideurs et acteurs de la recherche publique et privée pour évoquer les enjeux du Biotesting et remonter les besoins industriels. Les deux journées seront rythmées par des conférences, des tables rondes, des ateliers avec restitution en plénière et des plages horaires dédiées au networking

March

11

### Finale Ma thèse en 180s – Paris Saclay

**Date and time :** 11<sup>th</sup> March 7pm – 10pm

**Free event \_ Virtual event (In French) – [CLICK HERE](#)**

Concours Ma thèse en 180 secondes: trois minutes de sciences et d'éloquence! Les doctorants ont 180 secondes pas une de plus pour vous expliquer leur projet de recherche en le rendant passionnant et compréhensible par tous! Une occasion unique de vulgariser le contenu de leurs travaux auprès d'un public non spécialiste!

March

11

### Junior Scientist and Industry annual meeting

**Date and time :** 11<sup>th</sup> March 9am – 5pm

**Free event \_ Virtual event (In English) – [CLICK HERE](#)**

The JSIam is the place where junior researchers explore possible career paths outside of academia and start building connections ; and it's where industry and startup professionals can find the talents of tomorrow and keep up with the latest research going on in the labs of the GIANT Innovation Campus

March

17

### Round Table Data science and Bioinformatics – BIOTechno Paris

**Date and time :** 17<sup>th</sup> March , 6:15 pm – 7:45 pm

**Free event \_ Virtual event (In French) – [CLICK HERE](#)**

Come discover everything about the growing field of data science and bioinformatics and ask all your questions to our confirmed speakers that will share their experience and career path with you! The three following speakers have already accepted to join us: Claire Baudier (data scientist, Servier), Mathieu Clément-Ziza (Head of Data Science and Bioinformatics, Lesaffre) and Anna-Isabella Rerra (Bioinformatician, Evotec). Online registration will open shortly on our social media page (Facebook, LinkedIn). Stay tuned!



## Calendar

March

29

**Forum de la Recherche en cancérologie****Date and time** : From 29<sup>th</sup> March to 2<sup>nd</sup> April**Free for students, academia, health workers\_Virtual event (In French) – [CLICK HERE](#)**

Cette édition se place sous le signe des enjeux à venir de la recherche en oncologie, à l'orée de la prochaine stratégie décennale de lutte contre le cancer. Ce sera l'occasion d'aborder les priorités en prévention des cancers, de questionner sur les séquelles des cancers et le risque de second cancer, et de partager sur les solutions face aux cancers de mauvais pronostic.

March

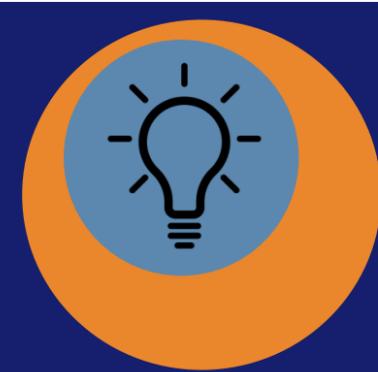
26-28

**Hacking health camp****Date and time** : From 26<sup>th</sup> 8:30am to 28<sup>th</sup> 6pm**Partly free (some conferences, opening and closure ceremonies)****10€ for students – [CLICK HERE](#)**

[Hacking Health Camp](#) est un évènement international qui vise à créer les outils innovants de la santé de demain en ouvrant un espace collaboratif exceptionnel entre professionnels de santé, designers, hackers, makers et entrepreneurs.

L'évènement est à destination de toutes les personnes intéressées par l'innovation en santé, inspirant professionnels de santé et professionnels du numérique sur leurs opportunités communes dans l'avenir de la santé.

Les interviews et les conférences durant le hackathon ainsi que les cérémonies d'ouverture et de clôture du hackathon sont accessibles gratuitement en ligne.



Our suggestions for the month

BIOTechno's **REAL** favorites



**READ**

**12 Biotech-themed online courses to try at home**

By Jonathan Smith – [www.labiotech.eu](http://www.labiotech.eu)

**Papier-Mâché – La publication scientifique facile à digérer**

site de vulgarisation scientifique <https://papiermachesciences.org/>



**ANALYZE**

**UNESCO research shows women career scientists still face gender bias**

UNESCO Press Release February 2021

**The computers rejecting your job application**

By Andrea MURAD – Business reporter BBC news



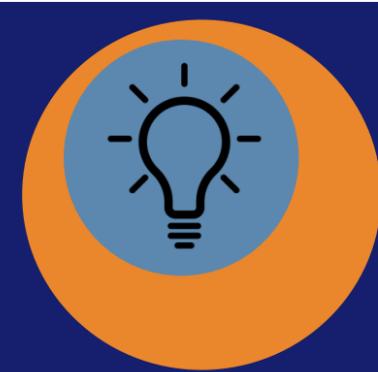
**LISTEN**

**40 Nuances de Next – Podcast**

Rencontres avec les entrepreneurs de la Tech française  
Par Olivier Mathiot et Thomas Benzazon

**The Long Run – Podcast**

Biotech insiders talk about the tough journey of turning scientific research into something meaningful  
By Luke Timmerman (Timmerman Reports)



## Our suggestions for the month



## Start-up on the Scene

## CARBIOS

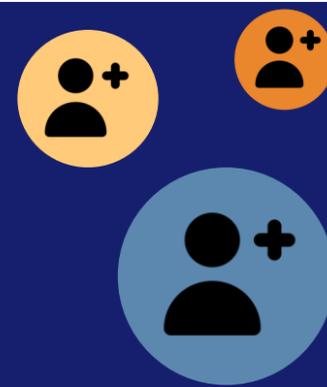


Over the past 20 years, the world has produced more plastics than in the previous 50 years. This increase is largely due to single-use products and packaging. Other than reducing plastic consumption, being able to recycle them in large quantities would certainly reduce their presence, especially in the oceans. Nowadays, in France, 78% of plastics are not being recycled. In addition, the French law on energy transition for green growth (*loi relative à la transition énergétique pour une croissance verte*, or LTECV) of 2015 imposes a 50% reduction of the volume of waste landfilled in 2025. To get out of this puzzle, a French company has gone into the adventure: **Carbios**.

**Carbios is a green biochemistry company**, based in Auvergne, which designs and develops enzymatic bioprocesses in order to **specifically deconstruct the dominant polymers that make up plastic and textiles: PET**. The resulting monomers from depolymerization are purified, then re-polymerized, allowing endless recycling as well as the production of 100% bio-recycled objects (1). The other goal of Carbios is to **develop 100% compostable plastics with a controlled lifespan**, integrating specific enzymes at the heart of the plastic product.

Last November, **Carbios succeeded in producing the first bottles « containing 100% recycled Purified Terephthalic Acid (rPTA) from textile waste that contains a high PET content »**. Multinationals brands such as Nestlé, PepsiCo, Suntory, Michelin and L'Oréal have now decided to work hand in hand with Carbios. The next step is to validate the discovery with the construction of a first industrial demonstrator near Lyon and to be able to sell the process to the plastics industry by the end of 2022. If they succeed in doing so, Carbios will have greatly contributed to the LTECV objectives.

(1) Tournier, V., Topham, C.M., Gilles, A. et al. An engineered PET depolymerase to break down and recycle plastic bottles. *Nature* **580**, 216–219 (2020). <https://doi.org/10.1038/s41586-020-2149-4>



## JOIN US!



## Volunteer Journalists

- Are you involved in the organization of an event interesting for young scientists and want to promote it ?
- Will you participate to one of these events and are willing to write a review afterwards for our newsletter ?
- Do you want to signal an event to add it to our calendar section ?
- Do you have an idea for a content that could fit in the BIOTechno newsletter ?

Contact : [pres.rbt@gmail.com](mailto:pres.rbt@gmail.com)

## BIOTechno Volunteers

The BIOTechno network is looking for a new team !

All positions are available (president, vice-president, secretary, community manager...). If you want to participate to a great associative experience that will help you and others fellow young scientists to develop a professional career in the biotechnology field, contact us to get more information !

Contact : [pres.rbt@gmail.com](mailto:pres.rbt@gmail.com)

## Become a Partner of the BIOTechno Network! Private companies / Startups / Institutions

In 2020, more than 30 private and institutional partners supported the BIOTechno network. You can also become our partner, get the opportunity to meet young professionals with a solid scientific background willing to develop their career in the biotechnology field. You will be able to present your company to a targeted audience during the BIOTechno events 2021 :

→ Monthly webinars organized by the BIOTechno Paris team ([biotechno.paris@gmail.com](mailto:biotechno.paris@gmail.com))

→ e-Forum organized by the BIOTechno Auvergne-Rhône-Alpes team ([forumbiotechno.ra@gmail.com](mailto:forumbiotechno.ra@gmail.com))

You also have the opportunity to publish job offers for your company in our monthly newsletter. Your next talented employee is probably a member of the BIOTechno network !

Contact : [pres.rbt@gmail.com](mailto:pres.rbt@gmail.com)

Follow us!



[www.reseau-biotechno.com](http://www.reseau-biotechno.com)