

CONTENT

Interview: Pop'Sciences

Virtual portal to share scientific and technical knowledge



The fine art of communicating science and why this is now more important than ever by Samuele Lisi

Calendar of Events

Don't miss out on key events to network, present your work or learn new things!

BIOTecho's REAL favorites of the month

We recommend you the best to REad, Analyze and Listen to.

Discover the startup Smart Immune!

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NEW! Our website dedicated to the BIOTechno newsletters

http://www.reseaubiotechnonewsletter.fr/





















Interview : Pop' Sciences

POP' SCIENCES

Virtual portal to share scientific and technical knowledge



Share the knowledges, open the university campus, create content with and for all citizens, that is the leitmotiv of Pop'Sciences, striving to answer to all of us looking for knowledge, experiences, creative contents about sciences and techniques....

We met with Samuel BELAUD, editor in chief of Pop'Sciences Mag and Cécile RONDEAU, in charge of communication and partnerships for Pop'Sciences.

They talked about their careers, their missions with Pop'Sciences, projects such as Festival Pop'Sciences organized between the 9th and 11th of July with « Perpetual flow » as a general theme.

To conclude the meeting, each of them addressed an inspiring message to young scientists.

Find the video here (in french with english subtitles)





To learn more about Pop'Sciences, click here







The Fine Art of Communicating Science and Why This is Now more Important than Ever

by Samuele Lisi, Ph.D. - Biopharma Analyst at Inova | Passionate communicator | we're hiring |

Remember 2020?

If you are a scientist in life science, this is probably one of the years in which you've been most popular. The time of your colleagues making fun of you because of your not-so-funny scientific jokes was over. In 2020, science has been at the center of the stage.

But..were you ready for this?

Let's see where you can find examples of popular science in action and what you can do to communicate science.

What is scientific communication or popular science?

Let's start with boring definitions:

"Science communication (or Popular science or Popsci) is the practice of informing, educating, raising awareness of science-related topics, and increasing the sense of wonder about scientific discoveries and arguments (Science communication -Wikipedia)"

The term popular science is intended for broad-range topics, directed to a general audience. An example of this is the popular science magazine created in 1872. Its name? Popular Science (of course). The magazine won over 58 awards, and it is now translated into over 30 languages and distributed in 45 countries.

In France, every year Ph.D. students present their thesis work in a three minutes format on the "Ma thèse en 180 seconds (or MT180)" contest. Inspired by the "Three minutes thesis" of the University of Queensland (Australia), MT180 is an incredible opportunity to popularize complex subjects in a very short amount of time. If you want to get a sense of what this contest looks like, watch the videos of 2019 edition: 1er prix du jury & prix du public - Tom Mébarki - Finale nationale MT180 édition 2019 - YouTube

Also, follow the MT180 website, the semi-finalists of the 2021 edition were announced on the first of April! (it's not an April's fool joke)





The Fine Art of Communicating Science and Why This is Now more Important than Ever

by Samuele Lisi, Ph.D. - Biopharma Analyst at Inova | Passionate communicator | we're hiring |

· What jobs can you do in Scientific Communication (and how to start doing them)?

Now, if you follow our newsletters, chances are that you are a biotech scientist and you look for a job (now or in the future). So what are the job opportunities in scientific communication?

First, you can start communicating science in many ways and not only for getting a salary. Today is easier than ever to share your passion for science worldwide. Instagram, Linkedin, Facebook, Youtube or your personal blog are only some of the channels you can use to spread your nerdy fun-facts around the super bacteria you're currently working on.

Yes, but how many people will subscribe to a science channel? Well, Vsauce (Vsauce - YouTube) has 16.7 million subscribers (April 2021) and he has the most followed scientific communication channel on Youtube. You might be surprised when you look at his videos (search this: What If Everyone JUMPED At Once? - YouTube).

Once you started to put your word out and you like it, here is a must-read article to know how to switch from academia to science communication (How I switched from academia to science communication). Evguenia Alechine became a scientific communicator for ... communicating scientific knowledge to the public in a way that can positively affect their health and wellbeing". The transition required a sabbatical year and some personal questioning, but now Dr. Alechine is a successful Medical Writer and leader of Medical Writing Organization, an online training program run by Cheeky Scientist for Ph.D. holders who want to move into the medical writing or science communication.

Conclusion

In the new COVID19 era, popularizing scientific topics is becoming more important than ever. In China, to prevent the disease from spreading, 2 680 social media posts on home quarantine and personal hygiene information went online in February 2020, and counted 443 million viewers (Science communication in the COVID-19 pandemic). In France, the communication campaign and constant app updates helped the government to almost reach the 15 million-downloads target for the application #Tousanticovid.

Ultimately science communication is crucial in the successful deployment of vaccines.

As a key takeaway, remember: often underestimated, how you communicate science affects the possibility to reach your goals. Whether you want to achieve a great thesis defense, get a new position outside academia or simply raise awareness about a scientific topic, good communication is an asset that you can't live without.





Calendar of events

April

2

MOOC Epigenetics – FUN platform

Date and time: 2nd April – 2nd June

Online courses (in English)

This course aims to provide a basic fundamental knowledge of what is considered to be epigenetics and wants to illustrate well characterized examples of epigenetic phenomena in many different model organisms. In addition, it will be explained in detail the molecules that participate in the epigenetic inheritance and their mechanisms of action. Furthermore, the implication of epigenetics in development, and how environmental experiences can change our life and the life of our progenies through epigenetic mechanisms will be discussed. Finally, examples of diseases that are influenced by epigenetic mechanisms will be described. To follow this course, you have the choice between two formulas. The DISCOVERY path gives you access to videos, quizzes and exchanges in the forum. Additionnaly, the QUALIFYING path gives you access to a qualifying exam.

April

Les métiers de la communication scientifique et médicale

Webinaire ABG

Date and time: 7th April 11:30 am

Free but registration mandatory and limited access (in French)

Après la famille des métiers technico-commerciaux , ABG vous proposons de découvrir la famille des métiers de la communication scientifique. Venez écouter et échanger avec 4 docteures qui occupent aujourd'hui les fonctions de Médiateur Scientifique, de MSL (Medical Science Liaison), de Rédacteur Médical ou encore de Consultant en communication scientifique et Innovation.

April

8

Biologics by design

Webinaire Genopole / Schrödinger design platform

Date and time: 8th April 11 am

Free but registration mandatory (in English)

In this webinar, it will be shown how accurate and reliable computational solutions can be applied during research and development to direct experimental effort, subsequently reducing costs and timelines. In addition to the webinar itself, you will have access to a virtual coffee break with different breakout rooms, so that you can discuss your own research challenges and understand how the Schrödinger platform can improve your discovery process.





Calendar of events

April

6

Symposium Sex in Science: a side effect?

Date and time: 6th April 8:30 am to 6:40 pm Virtual event (Zoom) - Free but registration mandatory (in English)

The association of young researchers of Institut Cochin (Jecco) presents its annual symposium, this year's theme being « Sex in Science : a side effect ? ». This event is organized by volunteers, both Phd students and postdocs, for a large public (students, postdocs, researchers, engineers, technicians, administratives).

If you want to participate to the flash-talk session, send an abstract (5000 characters max) to: symposium-jecco.u1016@inserm.fr. Your research project should have a sexual/genderrelated connotation (ex : prostate cancer, fetus-mother immunization, bonobo matriarchal society...)



XIIIth Symposium JeCCo: <u>Sex in Science</u>: a side effect?

(9h00 – 9h10) Opening by Pierre-Olivier Couraud, Director of Institut Cochin

(9h10 - 9h40) Introduction - Genetic bases of sex determinism in mammals Dr. Daniel Vaiman (Institut Cochin, Paris)

Session 1 - Mars and Venus: so close and yet, so far?

(9h40 - 10h10) Inactivating your seXX chromosome: a good strategy toward genetic sex equality? Dr. Claire Rougeulle (Unité d'Epigénétique et Destin Cellulaire, Paris)

(10h10 - 10h40) Stem Cells, Sex and Signalling: Tissue Renewal in the Adrenal Cortex

Dr. Andreas Schedl (Institut de Biologie Valrose, Nice)

(10h40 - 11h00) Coffee break

(11h00 - 11h30) Brain, gender and prejudice

Dr. Catherine Vidal (Comité d'éthique INSERM, Paris)

(11h30 - 12h00) X-chromosome and sex difference in immunity Dr. Julie Chaumeil (Institut Cochin, Paris)

(12h00 - 12h30) Flash Talk (5min. Aim: present your work)

(12h30 - 14h00) Lunch + Votes

Session 2 - When diseases have a gender preference

(h00–14h30) Genetic studies of challenging arterial diseases predominant in women Dr Nabila Bouatia-Naji (PARCC, Paris)

(14h30 - 15h00) Consideration of sex in the bladder mucosal immune response

Dr. Molly Ingersoll (Institut Pasteur, Paris)

(15h00 - 15h30) **SExposome** Dr. Xavier Coumoul (Université de Paris, Paris)

(15h30 - 15h50) Coffee break

(15h50 - 18h20

Chairman: Dr. Claude-Olivier Doron (Université de Paris, Paris)

- Dr. Laurence Brunet (Université Panthéon-Sorbonne, Paris)
- > Pr. François Villa (CRPMS, Université de Paris, Paris)
- Dr. Arnaud Alessandrin (LACES, université de Bordeaux)

(18h20 - 18h30) Flash Talk winners - Endings

















Calendar of events

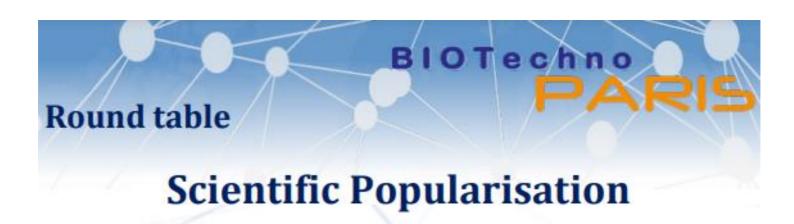
April

Round Table Scientific Popularisation - BIOTechno Paris

Date and time: 13th April at 6pm

13 **Virtual event - Free but registration mandatory (in English)**

BIOTechno Paris is happy to invite you to take part in its next virtual Round Table: Scientific Popularisation! Come join our two confirmed speakers (and more to be announced) on April 13th at 6pm for a lively discussion about scientific communication and popularisation. Stay tuned, registration will open shortly!



- SAVE THE DATE -



04/13/2021 6 pm - 7.30 pm

Registration opens soon

You are warmly invited to join us to discuss about Scientific communication with our guests



Lisa Quetel Scientific mediator. Cité des sciences et de l'industrie



Renaud Pourpre Science communicator. Co-founder & Podcaster of The Lonely Pipette podcast





Calendar of events

April

Celebration of Science day

14

Date and time: 14th April - 10 am to 1pm

Virtual event - Free but registration mandatory (in English)

With 2020 behind us, we enter 2021 with a euphoric feeling of renewed recognition for science. To acknowledge the global scientific community and everything that has been achieved over the past year please join us on the **14th of April** for a "Celebration of science day" appreciating scientist superstars. Topics include CRISPR technology, RNAi technology, Orthogonal validation techniques.

April

15

La COVID19: Regards et questions interdisciplinaires

ENS Lyon – Alain Fisher

Date and time: 15th April – 2 pm to 3 pm

Virtual event - Free but registration mandatory (in French)

Ce séminaire a vocationà diffuser des informations scientifiques relatives à la Covid-19 et à et les mettre en perspective à l'aune d'interrogations et de savoirs provenant de toutes les disciplines (sciences exactes et expérimentales, humaines et sociales, etc.) et de multiples expériences, à étendre le champ du débat à toutes les catégories d'acteurs (chercheurs, étudiants, lanceurs d'alerte, journalistes, représentants ou citoyens) et à l'articuler dans une réflexion interdisciplinaire envisageant dans le même mouvement la pandémie, les moyens de la réduire ou de la circonscrire, leurs corollaires sociaux, politiques, épistémologiques. Ce séminaire sera donc pensé pour une audience la plus interdisciplinaire et la plus large possible. Les conférences se tiendront en Visio-conférences accessibles à partir à : https://webinar.ringcentral.com/j/1494949842. La séance inaugurale aura lieu le **jeudi 15** avril de 14h à 15h.

April

22

Are Black Holes real? A mathematics perspective

By Sergiu Klainerman

Date and time: 22th April 6pm to 7:30 pm

Virtual event - Registration mandatory (in English)

April

26&28

Atelier de préparation aux entretiens d'embauche

par BioDocs Lyon

Date and time: 26th & 28th April

Virtual event - Registration mandatory (in French or in English)

Must be a member of BioDocs Lyon (adhesion 5 euros)





Calendar of events

Before

31st

May

Prix Jeunes Chercheurs par PROMEGA

Date and time: submission of abstracts (in English) before the 31st of May Winners will be announced the 6th of October

Le prix National Jeunes Chercheurs décerné par Promega récompense les meilleurs articles / communication scientifiques qui utilisent une technologie Promega et mettant en avant une application / méthodologie novatrice.





Our suggestions for the month

BIOTechno's REAL favorites



<u>Tu mourras moins bête mais tu mourras quand même</u> Blog et livre



What's next for postdocs? Nature Cancer 2020

Postdoctoral researchers face substantial challenges and stresses that have been exacerbated by the COVID-19 pandemic. Positive action is needed from research institutions, funders and individual investigators to support postdocs and fortify the research endeavor.

Don't let perfection be the enemy of productivity

By Alice BOYES – Harvard Business Review (March 2020)



Podcast « I AM BIO » hosted by BIO President & CEO Dr. Michelle McMurry-Heath.

Powerful stories of biotechnology breakthroughs, the people they help, the global problems they solve, and the politicians with the power to mess it all up.

Hopkins Biotech Podcast

Illuminating life science career opportunities outside of academia through the experiences of those who have been there before.





Our suggestions for the month







How to revolutionize immune recovery to fight life-threatening infections and blood cancers:

Smart Immune, an ambitious and growing biotech focused on T-cell medicine By Anne-Céline Derrien, March 31st 2021

What if patients suffering from severe blood diseases, such as immune deficiencies and cancers, could have their immune system rebooted shortly after a transplant, thus avoiding the severe and lifethreatening side effects that often arise? That is the ultimate goal set by Smart Immune, a rapidly advancing biotech based in Paris since 2017, in a foundational collaboration with cell and gene therapy teams in the Necker Enfants Malades Hospital.

Co-founded by the internationally recognized pioneer in gene therapy Pr Marina Cavazzana (CMO), expert in immunodeficiency and T cell differentiation, Dr Isabelle André (CSO) and Dr Karine Rossignol (CEO), Smart Immune bridges together scientific, clinical and development expertise with the aim to radically change the prognosis of patients affected by severe blood inherited diseases or cancers such as leukemia.

For numerous patients suffering from immunodeficiencies, the only curative treatment available is a transplant of the stem cells of the blood, referred to as a Hematopoietic Stem Cell Transplant (HSCT), which allows the patient to reconstitute all the types of blood cells needed in the body. However, after a graft and before recovery of their immune system, patients lack immune cells that normally fight back pathogens, and are exposed to a high number of potential problems, such as severe infections or relapses. Scientists and clinicians of Smart Immune therefore made the most of over 25 years of sharp understanding of T-cell differentiation and HSCT to develop a pioneering solution for such patients: an ultra-rapid differentiation of T-cells ex vivo (7 days versus the usual 12 months) that are then transplanted into the patient. Those T-cells, or differentiated HSCs, are an extremely efficient weapon against infections, and thus ensure a fast and safe multipotent recovery of the immune system to fight back potential pathogenic complications and cancer cells.





Our suggestions for the month





Smart Immune's new biotherapy based on T-cell progenitors, called ProTcell, offers ground-breaking advances in translational T-cell medicine and has the potential to revolutionize the clinical outcome for numerous patients suffering from blood disorders.

In just over 3 years, Smart Immune has managed to patent their ProTcell platform technology, which is applicable to all cell and gene therapies involving T cells. As a demonstration of its success, Smart Immune new technology now has one clinical trial on Severe Combined Immunodeficiencies already in clinic, three ongoing clinical trials in phase I/II for pediatric and adult leukemia in France and in the USA, and a milli-fluidic automation project.

With time, this technology will most likely have a growing number of applications, representing in itself a completely new generation of T cell medicine and accelerating the development of innovative and promising treatments. With no doubt, Smart Immune is a big step towards a safer, more effective, and more affordable HSCT medicine, and therefore a much improved patient prognosis.

References:

- •https://www.linkedin.com/company/smartimmune/about/
- •https://www.smart-immune.com/
- •Concise Review: Boosting T-Cell Reconstitution Following Allogeneic Transplantation-Current Concepts and Future Perspectives. Simons L, Cavazzana M, André I. Stem Cells Transl Med. 2019 Jul;8(7):650-657. doi: 10.1002/sctm.18-0248. Epub 2019 Mar 18. Review.
- •Le Monde, Sciences et Médecine : « A l'hôpital Necker, une start-up mise sur un traitement post greffe innovant », F. Rosier, 21 janvier 2020.
- •Biotech Finances, Entreprises : « Smart Immune : des fonds pour booster les greffés », 7 juin 2020.



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?

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

Become a Partner of the BIOTechno Network!

Private Industry / 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)
- → e-Forum organized by the BIOTechno Auvergne-Rhônes-Alpes team (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!