CAMPUS BIOTECH NEWSLETTER October 2020



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ACADEMIC NEWS BERTARELLI FOUNDATION CAMPUS BIOTECH CATALYST FUND SELECTS SIX PROJECTS IN ITS 2020 FUNDING ROUND

EPFL & THE BERTARELLI FOUNDATION

The Catalyst Fund – supported by the Bertarelli Foundation – has selected six research projects to fund this year.

Led by professors from EPFL and other Swiss Universities, these projects all aim to develop new treatment options for neurological disorders.

Created in 2017, the Catalyst Fund aims to invest in translational projects targeting innovative approaches for diseases affecting the brain, spinal cord, peripheral nervous system and sensory organs. "The Catalyst Fund is designed to foster innovative research and the development of life-saving treatments for diseases in neuroscience," says Ernesto Bertarelli. As the third call for proposals is now complete, six projects were selected for a total of CHF 1,788,619. "I offer my sincere congratulations to the six newest laureates at Campus Biotech," declare the Co-Chair of the Foundation.

For further information, please visit our website.

ACADEMIC NEWS SPORT AND MEMORY GO HAND IN HAND

UNIGE



By exploring the benefits of sport in memory and motor learning, scientists at UNIGE are opening up promising perspectives for school programmes and in the prevention of Alzheimer's disease.

If sport is good for the body, it also seems to be good for the brain. By evaluating memory performance following a sport session, neuroscientists University of from the Geneva demonstrate that an intensive physical exercise session as short as 15 minutes improves memory, including the acquisition of new motor skills. How? Through the action of endocanabinoids, molecules known to increase synaptic plasticity. This study, to be read in the journal <u>Scientific Reports</u>, highlights the virtues of sport for both health and education. School programmes and strategies aimed at reducing the effects of neurodegeneration on memory could indeed benefit from it. Find out more on our website.

ACADEMIC NEWS A LINK BETWEEN SENSORY NEURONS ACTIVATION AND THE IMMUNE SYSTEM

EPFL



Scientists at EPFL, ETH Zurich and Harvard Medical School/Boston Children's Hospital have developed an implantable technology that enabled the discovery of an interaction between sensory neurons and immune cells. Find out more at the <u>following link</u>.

ACADEMIC NEWS TWO CNP-RELATED COMPANIES IN THE 2020 TOP 100 SWISS STARTUPS

EPFL



G-Therapeutics and Imverse are among the TOP 100 Swiss startups 2020

The <u>TOP 100</u> Swiss Startup Award 2020 (organized by VentureLab) has revealed the list of the 100 most innovative startups of 2020, on September 9th, during a ceremony held in Zurich; among them, two CNP spin-offs: G-Therapeutics (36th overall, 3rd in medtech category), and Imverse (91th overall). Beyond the recognition of the success of these two companies, the awards allow recipients to get connected to investors, corporate executives, and establish new business relationships. Congratulations to our colleagues from G-Therapeutics and Imverse!

ACADEMIC NEWS FACULTY POSITION IN BIO/MEDICAL INSTRUMENTATION

EPFL



The School of Engineering at EPFL invites applications for a faculty position in Bio/Medical instrumentation, including intelligent bio-instrumentation, human-machine interfaces, or biomedical robotics.

For further information, please visit the EPFL website.

ACADEMIC NEWS BRAIN STIMULATION REDUCES DYSLEXIA DEFICITS

UNIGE



Reading difficulties can be improved with non-invasive brain electrical stimulation, a hope for people suffering from dyslexia.

Neuroscientists from UNIGE have demonstrated, in a study published in <u>Plos Biology</u> a causal relationship between brain oscillations at a specific frequency (30 Hz) and the ability to process phonemes that is essential for reading. Using a noninvasive electrical stimulation technique capable of synchronizing neural activity at the stimulation frequency, phonological deficits and reading accuracy could be improved in adults with dyslexia.

For further information, please visit our website.

ACADEMIC NEWS NEW SNSF GRANTS AT CISA

CISA, UNIGE

CISA researchers have recently been awarded <u>SNSF grants</u>:



Dr Eva Pool received a SNSF Ambizione grant for her project entitled "Individual differences in emotional learning underpinning to compulsive vulnerabilities reward-seeking behaviors". The aim of the project is to investigate whether we can model the individual differences during Pavlovian learning - one of the fundamental form most of emotional learning - QS C framework to identify risk profiles to compulsive reward seeking addiction. behaviors (e.g., gambling, problematic internet use, or binge eating).





Dr Donald Glowinski obtained a SNSF Spark grant for his project entitled "Sensors-based behavioral analytics for simulation-based interprofessional team training". The aim of the project develop team behavioral to is analytics using a sensor-based approach to enhance and improve safety management team in interprofessional simulation-based team training (SITT).

<u>Roberto Keller</u> obtained a SNSF Doc.CH grant for his project entitled "On the Normativity of Correctness". The aim of the project is to inquire upon the notion of correctness by determining what it means for something to be correct or incorrect, how judgments of correctness provide us with normative guidance, and how correctness relates to other normative concepts such as values, norms, and reasons.

Our warmest congratulations to Eva, Donald and Roberto, bravo!

ACADEMIC NEWS New erc starting grants at CISA

CISA, UNIGE



Congratulations to <u>Dr Mael Lebreton</u>, who has been awarded European Research Council starting grants (2021-2026) for his project "Characterizing information integration in reinforcement learning: a neurocomputational investigation »!

Reinforcement learning (RL) characterizes how we adaptively learn, by trial and errors, to select actions that maximize the occurrence of rewards, and minimize the occurrence of punishments. While the behavioural, computational and neurobiological features of learning from singular experienced outcomes have been extensively studied, the mechanisms by which RL could leverage multiple, concurrent information samples – including abstract information about prospective outcomes – have been largely overlooked. As a consequence, little is known about how we prioritize, filter or value outcome information in RL, while these processes likely critically contribute to shaping learning behaviour.

For further information, please visit our web-site.

COMPANY NEWS THE IMPACT OF COVID-19 ON THE FUTURE OF THE HEALTHCARE INDUSTRY

IFPMA

IFPMA, with offices at Campus Biotech, is the body that represents the world leading pharmaceutical and vaccine companies towards the United Nations.

Among our member companies are the world's leading vaccine developers, including Pfizer, Johnson & Johnson, AstraZeneca, Sanofi, GSK and MSD, racing to develop a vaccine for COVID-19. IFPMA participated to <u>The New World Model</u>, an online event on the future of industry, organised by the <u>World Free Zones</u> <u>Organization</u>. The event explored the different angles of the new industry business models likely to emerge in a post-pandemic landscape. Our Director General, Tomas Cueni, was joined by executives from large global corporate groups, along with senior experts from global NGOs and multi-lateral organizations, to offer solutions and approaches to current challenges, emerging opportunities, and future threats across multiple industries and sectors. He was invited to speak in the Healthcare Industry Panel to answer important question such as:

- What has changed most radically in the biopharmaceutical industry during this crisis?
- What is the greatest challenge to overcome in the short term?
- What new business models are likely to emerge?
- And what new opportunities will this create?

During the interview, Thomas Cueni reflected on the unprecedented level of collaboration that we are witnessing during this pandemic and the deep sense of responsibility shared by the biopharmaceutical industry.

You can watch full interview <u>here</u>



COMPANY NEWS GENEVA STARTUP LAUNCHES A BLOOD TEST ON THE MARKET

COREMEDICA



Based at Campus Biotech, the very young start up CoreMedica Europe which recently became a subsidiary of the Swiss Medical Group (SMG) has become a serious player in the race initiated by major laboratories to fight COVID 19.

From 3 drops of blood taken from your fingertip, it can tell if you have been infected with the coronavirus in the past. But even better, according to its inventors, "it also helps to clarify one's general immune status by assaying key markers in the blood known to minimize the impact of a COVID-19 infection."

After collection, you simply return the kit by post to the lab for testing.

All Campus Biotech residents can benefit from CoreMedica new kit Covid-19 Immunity Profile. Visit: <u>www.coremedica.ch</u> and preorder it through info@coremedica.ch.

STARTUPS NEWS PROJECTS OF GENEUS.CH, THE INNOVATION INITIATOR FOR LIFE SCIENCES ENTREPRENEURS

GENEUS, CAMPUS BIOTECH INNOVATION PARK

Geneus is currently working on the following projects: Innovative Trauma Relief Access (INNTRA) is Swiss a specializing in the development organization and implementation of innovative short-term treatment programs have suffered for children who from situational. environmental and interpersonal traumatic events. The treatment programs involve sustainable local community engagement and global multisectorial partnerships. To meet urgent needs following the latest COVID developments, INNTRA launched the Zen Inntra Connect video series for children and adolescents to relieve youth stress & anxiety post Covid-19 crisis and help to cope with difficult emotions. TalisLife is an easy-to-use application that empowers you to improve your energy, stress resilience and health. The mobile application will be available on the usual app stores very soon, supported through a B2C campaign.

STARTUPS NEWS BETTERTOGETHER NIGERIA: NIGERIAN WINNERS & CHALLENGES RECAP

GOODWALL, CAMPUS BIOTECH INNOVATION PARK



Nigeria is an amazing country, from its ethnic and cultural diversity to its stunning natural beauty to its happy and resilient people and beyond. But—Nigeria is also a land of winners! From August 1–September 16, 2020, we hosted the BetterTogether program, five weeks of inspiring challenges, top speakers, and community content available exclusively on Goodwall. And, while it was available to all our 1.5 million plus Goodwallers from 150+ countries around the world, our Nigerian members showed up and won more than those from any other country!

<u>Here</u>'s a look at 18 of Goodwall Nigerian BetterTogether champions.

STARTUPS NEWS RELIEF AND NEURORX ANNOUNCE PARTNERSHIP FOR GLOBAL COMMERCIALIZATION OF RLF-100TM AND SELECTION OF COMMERCIAL PARTNERS

RELIEF, CAMPUS BIOTECH INNOVATION PARK



Relief and NeuroRx Announce Partnership for Global Commercialization of RLF-100[™] and Selection of Commercial Partners

- RLF-100[™] (Aviptadil) is in advanced stages of phase 2b/3 development in the US
- Rapid recovery of patients on ventilators and ECMO (extracorporeal membrane oxygenation) has been reported under FDA Emergency Use IND authorization at multiple clinical sites

For further information, please visit the <u>following web-site</u>.

STARTUPS NEWS EBAMED IS AWARDED EUR 2.4 MILLION BY THE EUROPEAN UNION TO DEVELOP ITS CARDIAC MOTION MANAGEMENT PRODUCT

EBAMED, CAMPUS BIOTECH INNOVATION PARK



September 23, 2020 - EBAMed is glad to announce the award of a non-dilutive EUR 2.4 M grant from the competitive EU_H2020 research and innovation program under grant agreement No 954783. The grant will allow the company to pursue its proton therapy medical devices development (software and hardware) and perform a first-in-human test.

For further information, please contact Adriano Garonna at: adriano.garonna@eba-med.com or visit the <u>following web-site</u>.

CAMPUS BIOTECH'S ECOSYSTEM BREAKING DOWN BARRIERS BETWEEN INSTITUTIONS

CAMPUS BIOTECH

Founded on the principle that to move forward as a region, as a country, as people, we need to break down barriers between institutions, between disciplines, between research and business, Campus Biotech provides an environment that supports collaboration and facilitates the transition from research to industry. Therefore, every month, we present you a different platform, company, research group and entity from the Campus Biotech Innovation Park to promote interaction between research groups and between the complementary worlds of research, industry and start-ups.

We believe, in fact, that true innovation only happens when ideas are exchanged freely and developed outside of the box in which they were born.



COMPANY OF THE MONTH ADDEX THERAPEUTICS



Addex Therapeutics is a clinical stage biopharmaceutical company focused on the development of novel, orally available, small molecule allosteric modulators for neurological disorders. Allosteric modulators are an emerging class of small molecule drugs, with characteristics that give them significant therapeutic over conventional orthosteric molecules advantaaes or biological molecules. They bind to the therapeutic target at a site separate from the site used by the natural ligand (= allosteric site). This allows a more modulating action of the function of the therapeutic target, and not an ON / OFF typically obtained with ligands which bind the same site as the natural ligand (= orthosteric site). Addex's unique technological platform enables the identification and optimization of allosteric modulators of receptors of interest, and has generated Addex' current therapeutic pipeline.

The most advanced program is Dipraglurant, a negative allosteric modulator of the mGlu5 receptor, which will be tested for its anti-dyskinetic effect in phase 2b/3 clinical trial in patients with Parkinson's disease, as soon as the Covid crisis will allow. Addex' second clinical stage program, the positive allosteric modulator of the mGlu2receptor ADX71149, will be tested in epilepsy patients in 2021. Further pre-clinical research programs are at various stages before entry inclinic, most of them in collaboration with leading industrial and academic partners. Addex shares are traded on SIX and Nasdaq (ADXN).

For further information, please contact Robert Lütjens at Robert.Lutjens@addexpharma.com or visit <u>our web-site</u>.

RESEARCH GROUP OF THE MONTH INSTITUTE OF GLOBAL HEALTH (UNIGE)



The Institute of Global Health (ISG), managed by Professor Antoine Flahault, was founded in January 2014 as a transformation of the former Institute of Social and Preventive Medicine. This transformation was decided by the University of Geneva as a continuation of efforts to develop academic global health given the unique location of Geneva in the field.

Geneva hosts most of the major actors of global health: the World Health Organization, UNAIDS, the Global Fund to fight AIDS, Tuberculosis and Malaria, ICRC, GAVI, FIND, MSF and many other NGOs and foundations, with diplomatic permanent UN representations for more than 140 countries. The presence of some of these protagonists on Campus Biotech, for example FIND, allows for important synergies.

For further information, please contact Christine Lehmann at Christine.Lehmann@unige.ch

CAMPUS BIOTECH INNOVATION PARK'S ENTITY OF THE MONTH **ONEDOC**

🕰 onedoc

OneDoc was founded in 2017 by two EPFL graduates: Arthur Germain et Alexandre Curreli, who identified a gap in the Swiss healthcare system. "At the time, it was almost easier to book a trip to Asia than to book a medical appointment!" explains Arthur. That's how it all started. Today, OneDoc is the first online booking platform for medical appointments in Switzerland, with a team of 20 passionate entrepreneurs. They partner with groups such as Medbase, Hislanden, HUG, Arsanté, Magellan and Swiss Medical Networks. OneDoc is developed exclusively in Switzerland and their servers are based in the Swiss Confederation, in order to ensure the best security in the respect of data protection laws. For further information, please contact OneDoc at emma@onedoc.ch.



VIRTUAL EVENT BLUE BRAIN SEMINAR -CELL-SPECIFIC CHOLINERGIC MODULATION OF NEOCORTICAL NEURONS

EPFL BLUE BRAIN PROJECT



01 oct.

Blue Brain is delighted to announce that the next seminar in the series in Neural Computation, will be on 'Cell-specific cholinergic modulation of neocortical neurons'. The seminar will be given by Dirk Feldmeyer, Professor, University Hospital Medical School Aachen, and Professor and Group Leader, Research Centre Jülich. For further information, please contact Stiebrina Dace AT dace.stiebrina@epfl.ch or visit <u>our website</u>.

EVENT - UNIL, LAUSANNE UNIX SCRIPTING FOR LIFE SCIENTISTS

SIB SWISS INSTITUTE OF BIOINFORMATICS



01-02 oct.

Scripting allows shell users to automate repetitive tasks, thus improving reproducibility, reducing the risk of errors, freeing time, and avoiding boredom. Bioinformatics analysis pipelines may involve dozens or hundreds of steps that are each carried out by different command-line programs: assembling these into scripts allows users to treat whole pipelines as if they were ordinary shell commands.

Audience

This course targets users who have basic knowledge of interactive shell use (such as taught in the SIB's First Steps with UNIX in Life Sciences and are interested in moving from interactive to automated tasks. For further information, please contact training@sib.swiss or visit <u>their website</u>.

EVENT HACKAHEALTH GENEVA

CAMPUS BIOTECH



09-11 oct.

HackaHeatlh, a community that supports the development of personalized solutions for people with disabilities.

HackaHealth lives through annual hackathons where makers, designers and engineers work with people with disabilities to hack and prototype to improve their daily living. They believe in the power of togetherness, fighting disability through inclusion; and cultivate play, sharing, openness and designing with a purpose.

The next Hackathon is happening on October 9th to 11th 2020 at Campus Biotech and SDG Solution Space (CBIP).

Visit the website <u>www.hackahealth.ch</u> to discover the six projects and register to put your skills at use. Do not wait any longer, registrations stay opened for a few more days!

VIRTUAL EVENT 16TH WORLD CONGRESS ON PUBLIC HEALTH - WCPH2020

WFPHA



12-16 oct.

Register now for the 16th World Congress on Public Health - WCPH2020!

Do not miss the chance to participate to this unique event. The virtual WCPH2020 will be an exciting and engaging event with live streams of plenary sessions, 28 World Leadership Dialogues, 150 workshops, and presentations and posters from over 3,000 abstracts. Have you registered already? Registration rates for the virtual WCPH2020 have been substantially reduced, with further discount for students and for delegates from emerging countries. More information and registration <u>here</u>!

EVENT - UNIL, LAUSANNE LIGAND-PROTEIN DOCKING, AND COMPUTER-AIDED DRUG DESIGN

SIB SWISS INSTITUTE OF BIOINFORMATICS



03-05 nov. (registration in Oct.)

This workshop aims to present basics on molecular visualization, ligand-protein docking and several computer-aided drug design tools developed at SIB. Numerous case examples are taken from different therapeutic fields. Participants will use powerful, yet simple and intuitive, professional tools, commonly employed in molecular modelling, drug design and drug-target analysis. Some of these tools are based on original unique technologies and databases developed by the SIB, such as SwissBioisostere. For further information, please contact training@sib.swiss or visit

<u>their website</u>.

EVENT - UNIL, LAUSANNE NGS - QUALITY CONTROL, ALIGNMENT, VISUALISATION

SIB SWISS INSTITUTE OF BIOINFORMATICS



04-06 nov. (registration in Oct.)

Next Generation Sequencing (NGS) methods have had a large impact on many biological fields due to a very rapid decrease in cost and throughput. It often results in hundreds of gigabytes of data. This makes the downstream analysis very challenging and requires bioinformatics skills. In this module, we will introduce the most used sequencing technologies and explain their concepts. Using different datasets, we will practice quality control, alignment of reads to a reference genome and visualize the output.

This course is intended for life scientists who are already dealing with NGS data and would like to be able to start analysing them. For further information, please contact training@sib.swiss or visit <u>their website</u>.

EVENT RÉSONANCE - AFFIDEA SWITZERLAND 2020

AFFIDEA



06-07 nov. (registration in Oct.)

The annual teaching seminar "Resonance - Affidea" is a round table that facilitates exchanges between the various specialists in osteoarticular imaging: radiologists, orthopedic surgeons, rheumatologists, rehabilitation specialists, sports doctors and internists, whether they work in hospitals or private practice, in Switzerland or in France. This second seminar will be devoted to the shoulder, which represents the second most frequent reason for consultation in osteoarticular pathology. Register through <u>Affidea's website</u>!

If you have any questions or want to promote your virtual event, please don't hesitate to reach out to us at <u>media@campusbiotech.ch</u>.