**Mini-Campaign to support the development of
the new Computer Science Program of the Scienteens Lab**

About the Scienteens Lab

The Scienteens Lab (SL) was founded in 2013 by the University's research institute *Luxembourg Centre for Systems Biomedicine* (LCSB). From the very beginning, the SL's mission has been to offer high-school students a glimpse into the life of a researcher, by inviting them to participate in hands-on workshop inside the University's various laboratories. These interactive workshops give youngsters the opportunity to apply their theoretical knowledge acquired from schoolbooks, into real-life research activities. Aside from getting teenagers excited about applied research, the SL also wants to help students realize whether a career as researcher would suit them. Since its inception in 2013, the SL has evolved from a tiny two-person initiative into a full-fledged extra-curricular education centre*, teaching over one hundred workshops a year in biology, physics, mathematics, and most recently, also in **computer science**. The latter is currently in its 1-year pilot phase and has been made possible thanks to a donation by the Royal Bank of Canada. This ambitious program is implemented in collaboration with the University's Computer Science Department (DCS).

About the Campaign

As the initial feedback for this new coding program has been very positive, we decided to apply for a Flagship Grant from the Fonds National de la Research this spring. Since a total of 500,000 EUR is needed to develop this new coding program, we will apply for the maximum amount of 400,000 EUR from the FNR. The remainder needs to be raised through private donors. The importance of raising these 100k EUR is three-fold: (1) these funds are absolutely needed to accurately develop the coding program (2) developing corporate and foundation partnerships is important to the SL (3) raising these funds prior to submitting our FNR proposal will drastically increase our chances to receive the FNR grant.

As we are fortunate to have received a donation of 40,000 EUR by the Fondation Veuve Emile Metz Tesch for the coding program already, **we are now looking for additional donors to raise the remaining 60,000 EUR**.

Donor reward for donations of 10,000 EUR and up
- The donor will become an official partner of the Scienteens Lab and will have their name/logo displayed on the SL's website.
- The donor will receive a 'bronze'-level footprint on the LCSB Donor Wall in the Biotech II building on Belval Campus.
- The donor will be invited to the UL's annual Donor Event, including a visit of the Scienteens Lab.
- For corporate donors: We will offer a free workshop for your employees' teenagers during a family day event organised by SL.

About the Computer Science Program

The main objective of the new Computer Science Program at the SL is to make the topic of computer science accessible to all high school students, make them aware that computer programming can be applied to solve questions in all imaginable fields, give them the opportunity to learn some basic programming themselves, and thereby increase their programming literacy while at the same time taking way their fear for this subject. As with all the other topics taught at the SL, we also want to support students who develop a special interest for this subject matter, by helping them with additional internship at the University and answering their questions related to job opportunities in this field. Being aware that computer science is a topic that is sadly still very gender-biased, we want to organize specific activities that aim at encouraging girls interested in this topic.

Though teenagers are by far our main target audience, we will also develop courses geared towards teachers as well as to parents.

Over the next 2 years, we will develop 9 workshops for teenagers inspired by some of the most current and cutting-edge technology available in the field of computer science. Here are some examples:

Art and AI

After explaining some historical and actual facts on AI, kids will discover that there are more AI in our everyday life than they thought. Moreover, AI has nothing to do with the way science fiction describes robots. They will then learn to use an AI to produce art such as in the picture on the right side and finally learn to code to create art.
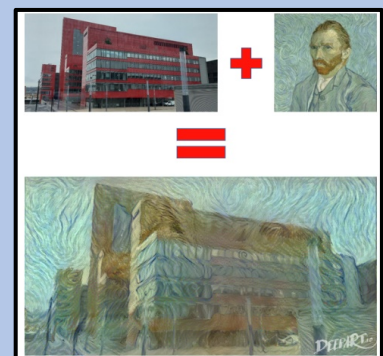
Play with data

Kids often think their data have no value. During this workshop, they will roleplay cyber spies and try to learn as much as they can by exploring the data we spread unconsciously while using our digital tools, e.g. facebook. Once aware of the amount of knowledge we could get with limited data, they will learn how to protect their data on Internet.

Make a robot dance

Introducing coding by making a robot dance motivates not only boys but girls also to learn to code. The interactivity with the robot is rewarding for the kids which facilitates progress. Without noticing, they acquire the necessary skills to be able to keep coding at home with different languages such as Scratch or AppInventor.

We thank you very much for your time and consideration. For queries and additional information please contact Philippe Lamesch: Philippe.Lamesch@uni.lu