**Press Release**

W.A. de Vigier Awards 2021

**“We ended up picking 17 startups instead of our usual Top 16“**

Solothurn, March 10, 2021 **17 startups are one lap further in the race for up to five coveted W.A. de Vigier Awards. The startups were selected from among 60 young companies who presented their ideas to the foundation board, and to numerous online viewers on Selection Day in mid-February. Up to five Swiss entrepreneurs will receive CHF 100,000 each at the award ceremony on June 16, 2021.**

On Selection Day on February 4, the Top 17 were chosen from among 60 pre-selected startups. A total of 217 applications were submitted.

"We had such a hard time picking 16 startups that we ended up selecting 17 this year“, says Regula Buob, Managing Director of the W.A. de Vigier Foundation. „The second special thing about this Selection Day was that it took place online via live-stream. Usually we invite about 60 selected guests. This year, between 350 and 410 viewers watched the pitches online. So even if just 17 startups made it to the next round, everyone got to present their idea to a pretty wide audience“, continues Buob.

Now the Top 17 will go through a leadership assessment and have an in-depth interview with the Foundation Board. Aspects such as leadership, team leadership and entrepreneurship will also be evaluated as selection criteria. In addition, expert reports will be prepared. The ten best are then selected during two presentation days. In mid-April, the ten finalists will be chosen and will present their highly innovative products at the Award Ceremony on June 16, 2021.

**These are the Top 17 (in alphabetical order)**

***cellvie AG from Matzingen (TG) - Leveraging the Therapeutic Potential of Mitochondria***

When the blood flow to a part of the body is interrupted, cells get damaged or die, even if blood flow is restored. Such cell injuries manifest themselves for example in heart attacks and strokes, killing millions of people every year. cellvie transplants viable mitochondria, the cell’s powerhouse, into distressed cells. It’s like jump- starting a car, allowing the cells to re-establish their energy metabolism and survive. The Harvard spin-off’s mitochondria therapy will first be applied in organ transplant patients.

***Cowa Thermal Solutions AG from Root (LU) - More Storage Capacity in Heat Pump Systems***

Heat pumps powered by photovoltaic systems are considered the gold standard for low emission CO2 heating of buildings. The problem is that PV electricity is available as surplus throughout the day, but not during the night and early morning hours. Cowa's technology increases the storage capacity of conventional water-based heat storage systems by up to a factor of 4, typically increasing the heating autarky level of common systems from around 30% to 70%.

***dimpora AG from Zurich (ZH) – Natural, High Performing Materials for Outdoor Clothing***

Current outdoor clothing is chemically harmful for the very environment outdoor enthusiasts love so dearly. In addition to that, these chemicals are unhealthy for the wearer. ETH spinoff dimpora provides outdoor brands with a biobased material that is as waterproof and breathable as its non-natural alternatives. This material allows the industry to pivot from old, resource intense and chemically harmful processes and products to a sustainable, healthy solution.

***Dotphoton AG from Zug (ZG) – Big Image Data Compression at Zero Quality Loss***

With more industries relying on high-quality imagery, the amount of big image data grows exponentially. Today’s image compression solutions either come with quality loss or don’t achieve sufficient image size reduction. Big image data storage and transfer costs are turning into a roadblock. Dotphoton offers a solution for professional imaging, allowing up to 10 times the amount of data compression with guaranteed quality preservation. It allows saving a factor of 5–10 in storage space and network bandwidth, as well as the associated time, power, and pain.

***flowbone SA from Renens (VD) – Injectible Gel for Hip Bone Strength Restoration in Elderly Patients***

In our aging society, fracture prevention in the elderly is an urgent topic. Hip fractures are the most costly and devastating, with a 1-year mortality of a staggering 20%. Drugs are inefficient for the hips and surgical techniques too invasive. EPFL spinoff flowbone developed a new generation of biomaterial that can be injected into the hips in a simple ambulatory procedure to locally restore bone strength in hips before they break.

***HemostOD SA from Preverenges (VD) – On-Demand Platelets Instead of Depending on Blood Donors***

Platelet transfusions save many lives, but supply is scarce, as the only source are blood donations. In addition to shortages, the transfusions can be contaminated and cause expensive, life- threatening complications. HemostOD manufactures platelets on demand from engineered stem cells. The startup’s technology allows all patients to receive platelet therapy at a much lower risk, leading to faster recovery and better clinical outcomes at a greatly reduced cost.

***Infrascreen AG from Neuchâtel (NE) – Climate Control for Greenhouse Growers***

Everyone should have acccess to organic vegetables. For this, greenhouses must become both more profitable and more sustainable. Infrascreen develops a nano-coated filtering material that provides growers with drastically improved climate management in the greenhouse at zero energy input. This leads to up to 80% greater yield, over 20% less energy consumption and reduced CO2 emissions.

***kaiosID SA from Villars-le-Terroir (VD) – Hidden Codes to Fight Counterfeiting and Improve Traceability***

Counterfeiting and grey markets pose two growing challenges for brands. kaiosID fights counterfeiting and illicit trade by covering the product’s packaging with invisible patterns that can be easily identified by an intuitive smartphone app. Once printed on the packaging, the random patterns become the fingerprint of the product and allow for product authentication (genuine/fake) and identification (traceability), thus restoring trust in brands and logistics.

***LEDCity AG from Zurich (ZH) – Smart LED Lighting Systems to Lower Energy Use***

Up to 40% of energy costs in commercial buildings are related to lighting. LEDCity equips light sources with sensors and AI-optimized algorithms to regulate lighting automatically. The startup’s plug and play system runs on a decentralized control unit, which means that no expensive management system is required. LEDCity’s solution drastically lowers energy use, cuts operating costs by up to 90% and reduces environmental impact.

***Lumiphase AG from Zurich (ZH) – Optical Communication Chips to Manage the Exploding Data Traffic***

Our world is becoming increasingly digital and data traffic is exploding. The infrastructure behind data centers and telecom networks is hitting a wall, and the industry needs a disruptive solution. Lumiphase develops novel optical communication chips that are very inexpensive, super compact and highly efficient. They allow the industry to replace today’s costly and power-hungry connections with a new generation of electro-optical links, ultimately enabling a new paradigm in datacenters‘ architecture and leading to more flexible, efficient and sustainable use of computing resources.

***MIRAI FOODS AG from Wädenswil (ZH) – Cultivating Real Meat from Animal Stem Cells***

Current meat production is unsustainable and has huge animal welfare implications. It is responsible for about 15% of global greenhouse gas emissions, and meat consumption is projected to grow by 70% by 2050. MIRAI FOODS cultivates real meat from animal stem cells without genetically or otherwise modifying the cells. The startup does what animals do – only outside the body. This approach can reduce greenhouse gas emissions from meat consumption by 80 to 90% and no animal has to suffer and die to produce the meat.

***Nagi Bioscience SA from Ecublens (VD) – Replacing Animal Testing with Tests on Microorganisms***

Testing of new substances is key to ensuring their efficacy and safety for humans and the environment. These tests are conducted on animals, which is ethically problematic, expensive and time-consuming. EPFL spin-off Nagi Bioscience developed the first device that allows fully automated and standardized substance testing on the micro-organism C. elegans as a sustainable, ethical and cost-effective alternative to animal testing, while still providing whole-organism results.

***Oxyle AG from Zurich (ZH) – Advanced Wastewater Treatment Technology***

There is an alarming contamination of surface and groundwater ecosystems with micropollutants such as antibiotics, pesticides, estrogens and pharmaceuticals. The ETH spinoff Oxyle has developed novel wastewater treatment reactors capable of destroying over 90% of a wide variety of toxic micropollutants from wastewater, including highly persistent compounds that are resistant to existing treatments. In contrast to current technologies, the startup’s approach is highly efficient, cost competitive, uses clean energy sources, and imposes a low carbon footprint.

***Testmate Health (ribolifeDx SA) from Chavannes-de-Bogis (VD) – At-Home Test for the Four Most Common STDs***

The wait-time for test results identifying the four most common sexually transmitted diseases (STDs) is three to seven days. Testmate Health will be the first rapid at home self-test that provides results in minutes, in an anonymous, convenient and easy manner. Results are scanned and uploaded to a paired app that guides patients towards appropriate follow-up if necessary.

***Terapet SA from Geneva (GE) – Better Dose Control in Proton Therapy For Cancer Treatment***

Proton therapy is the most precise radiotherapy for cancer treatment. However, monitoring the doses during treatments remains a guessing game based on simulations. Terapet SA, a CERN startup, develops

a novel medical device which enables medical doctors for the first time to monitor the delivered proton dose inside the patients during cancer treatment: in-vivo, non-invasive, in 3D and real-time. This solution ensures that every patient receives the right dose, every time.

***Volumina Medical SA from Epalinges (VD) – Minimally Invasive Breast Reconstruction After Cancer***

Reconstructive surgery after breast cancer is currently costly, risky, highly invasive and results are temporary or don’t look natural. EPFL spin-off Volumina Medical created AdiPearl, an injectable implant with the capacity to regenerate damaged tissues for breast reconstruction in a single minimally invasive procedure. AdiPearl will improve the quality of life by bringing to breast cancer survivors a safe, effective, quality, and cost efficient breast reconstruction solution.

***XRnanotech GmbH from Untersiggenthal (AG) – Nano-Scale X-Ray Optics***

Access to cutting-edge X-ray optics is a true bottleneck in many important research fields like medical imaging, drug discovery, microchip inspection and microscopy. By applying groundbreaking innovations in the field of nanotechnology, XRnanotech offers ten times better resolution, twice the photon efficiency and the best stability of state-of-the-art X-ray optics. The startup’s products allow investigating the smallest ever structures with unprecedented image quality.

**About the W.A. de Vigier Awards**

The W.A. de Vigier Award is the oldest prize for young entrepreneurs in Switzerland and, with annual prize money of up to CHF 500,000 (five times CHF 100,000), is one of the most highly endowed startup prizes in Switzerland. Over the past 32 years, the foundation has distributed over CHF 11 million of seed money. The results are over 90 flourishing startups, successful IPOs, multiple company exits and above all, many newly created jobs.

The following aspects are relevant for the evaluation of the projects: The entrepreneurial personality, the degree of innovation, the value for society as a whole, the technical and financial viability, market prospects and the potential for job creation.

**Contact details for questions**

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