Creative Connections Bodylight

About

Technology to combine biomedical research, graphical design and mathematical modeling. Enabling the creation of interactive in-browser simulators.

Fundraising

Investment	9.7 mil. Kč
Marketing	10%
Development	60%
Sales	10%
Analytics	10%
Support	5%
Others	5%

Team

Jiří Kofránek
Founder

Assoc. Prof. in biocybernetics with special focus in formalization of mathematical models and connecting software technology, graphical design and scientific knowledge

Tomáš Kulhánek
Co-Founder & CTO

Scientific software developer Ph.D. in biomedical informatics with special focus in computational physiology and integrative structural biology

Jitka Feberová
Sales and Support

E-learning specialist, support MD and Ph.D. in medical informatics with special focus on library research and review

Contact

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Problem

Complex problems in biology and medicine can be formally described as a set of mathematical equations - mathematical models.

The models are hard to implement as end user software, simulation and visualization

Models of normal, pathological and clinical physiology are not yet widely used in education, clinical praxis or medical or biotechnology product design.

Solution

We provide implementation of scientific knowledge in industrial standard object oriented modeling language - **MODELICA**

We authored our solution called **Bodylight** toolchain, with **no-code** and **low-code** tools to create nice interactive web simulators by domain experts.
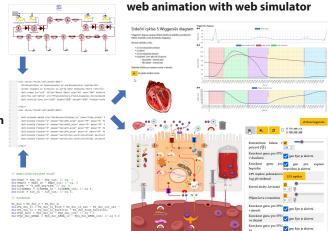We can deliver **atlas of physiology, pathophysiology and clinical physiology** to disseminate usage of models. We can connect different domain experts to deliver web simulators in different medical and non medical domains e.g. for **patient specific healthcare** including PKPD models to increase usage and implementation of such solution in clinical practice. We can deliver **simulators into VR/AR devices** to improve training of specialist using specific medical devices.

Product (preview, description)

model as diagram

web animation with web simulator

Source code of web simulator: (no code, only HTML and custom webcomponents)

model as equations

Business Model

E-learning, interactive atlas of physiology and/or web simulators as attachment to books about physiology
B2C, our team has domain experts in physiology, sell an online educational material from our portal in subscription fee basis.
Web simulators for other (not only medical) domains
B2B, our tools and technology facilitates cooperation among domain experts, software engineer, graphic designer. Web simulators for creators of medical devices and pharma industry.
Simulators as physical models for virtual/augmented reality
B2B, delivering models and simulators for AR/VR devices(MS Hololens2, Oculus Quest 2)

Business / Product Roadmap

Legal analysis	Business plan	E-learning app	Simulators for precision pharma	Acquisition or venture capital
Advise for further investment form (venture, dependent company) and participation of partners	Hire computer graphics, software developers, physiologists to build MVP	Atlas of physiology, pathophysiology and clinical physiology	White paper about sample usage of web simulators bringing better precision pharmacoterapy	Based on revenue and business state look for acquisition or further VC investment