

Careful Transition

Getting into Business (Science) in Hungary

Janos Nacsa MD, PhD

Zoltan Szallasi MD



internationally renowned scientist in bioinformatics and system biology,
specializing on how various cancer forms can be recognised through the
activity of genes

- 2006-present: Technical University of Denmark
- 2003-present: Children's Hospital Informatics Program at Harvard Medical School
- Department of Pharmacology, Uniformed Services University
- National Institutes of Health
- DOTE, Hungary

Zoltan Szallasi MD:

- 1) clear long term guidelines on what research areas the Hungarian state is interested in to support in the long run and WHY those ?
- 2) a transparent grant evaluation system with
 - a) foreign, unbiased reviewers
 - b) communicating the grant scores and review critiques to the authors
 - c) and publishing the rank of all grants along with their scores.



Zoltán Oláh Ph.D

- Co-Founder and CSO of Acheuron Pharmaceuticals, Inc.
- Adjunct Professor, University of Szeged, Hungary
- MS biology & chemistry and doctorate in life sciences
- Molecular biology of transmembrane proteins, ion channels, and kinases, cheminformatics and bioinformatics

**Acheuron
Pharmaceuticals, Inc.**

Executive Summary

- ***Acheuron Pharmaceuticals***, Inc. and ***Acheuron Hungary***, Ltd. are drug research and development companies, founded and co-owned by Zoltan Olah, specializing in pain, inflammation, and neuropathies
- Pipeline of proprietary drug candidates (AP001-AP010)
- Over-the-counter natural product
 - Further develop candidates and outlicense them
 - Market and sell over-the-counter pain control product

Mission of Acheurons

- ***Acheuron Pharmaceuticals*** and ***Acheuron Hungary*** discover and develop new patented drugs targeting ion-channels for unmet medical needs in the pain and inflammatory disease markets
- These drug candidates will then be marketed and sold to medium to large pharmaceutical companies worldwide

Facts about *Acheurons*

- California corporation established in 2004
- Headquarter in San Diego, California, USA
- Acheuron Hungary Ltd established in 2005
- Laboratories and offices in Szeged, Hungary
- Acheuron Hungary Ltd carries out chemo-, and bioinformatics on protein kinases of the human genome and drug discovery of painkillers targeting the vanilloid receptor type 1

Main Business Objective

- To develop a sustained pipeline of products
- Generate “proof of principle”
- Patent and successfully outlicense novel products

Achievements of Zoltan Olah

- Leads the pain, inflammation and neuropathy consortium, supported by a Jedlik Ányos grant, awarded by the Hungarian Governments; started in 2005-
- won Marie Curie reintegration grant from the EU in 2005 for two years (\$100k)
- funded Musgenex Ltd in 2006, a company produces reporter transgenic mice for drug discovery
- Established Strategic Partnerships
 - CycloLab Ltd.
 - Biopolisz Ltd.
 - University of Szeged
 - Biological Research Center of the Hungarian Academy of Sciences
 - NIDA and NIDCR, NIH, Bethesda, MD

Recent endeavors of Zoltán Oláh

- US patent pending therapeutic solutions for severe pain, inflammations and neuropathies (PIN) by use of potent vanilloids such as resiniferatoxin (RTX)
- Co-inventor of Gene Therapy of Pain, US patent #6,596,269, issued in 2003
- Currently, leader of the PIN consortium, manage 40+ people in different companies, universities and research institutes in three countries on two continents, *co-owner of APL, San Diego, CA; AHL, and MUSGENEX, Szeged*
 - Cloned and genetically labeled the Pain/Vanilloid Receptor type 1 (TRPV1) with fluorescent protein to understand cellular mechanisms of RTX, important in the analgesic use of potent TRPV1 agonists in the clinics
 - Cellular and *in vivo* functional screening of small compound libraries by robotics
 - Inventor of clinical use of RTX, currently generated 10+ additional leads, either antagonist or channel blocker of TRPV1, to treat severe pain conditions
 - Bench to Bedside management of RTX to clinical trial in cancer pain, NIDCR, NIH
 - Member of the panel preparing IND to use RTX in human phase I in 2006
 - 25+ academic research: Cancer, Pain, & Molecular Biology, Gene Therapy and Immunology
 - As the 1st employee, started up Research Institute for Human and Genetic Therapies, Gaithersburg, MD, 1997
 - Database and Content, Membrane Protein Production and Immunology
- 2 US patents, 62 papers, 100+ presentations,
- Divides time between San Diego and Szeged

Detailed Objectives of Acheurons

- To win 300M HUF grant support from the Hungarian government; project started in 2005 September – *Successfully achieved!*
- To win 24M HUF spin-off business award from the Hungarian government; project started in 2005 December – *Successfully achieved!*
- To win Marie Curie reintegration grant from the European Union totaling \$100,000 started in 2006 – *Successfully achieved!*
- To raise \$6 million in private capital by Q4 of 2007
- To sign first pharmacy/wholesale client by end of 2007
- To sign first pharmaceutical partner by beginning of 2008
- To achieve \$2 million in revenue by the year 2008

Janos Nacsa MD, PhD

Scientific Advisor

- Humancell, a Swiss and Dutch capital funded company providing services in the field of cryopreservation (bone marrow and umbilical cord blood, placental stem cell, ovarian and testicular tissue, egg, sperm, embryo) and related diagnostics.
- Medifert, founder of CIRIS Budapest, an international institute for human reproduction
- SISMER Genetics Budapest

