

modulight

Modulight

Tulevaisuuspäivä

Eduskunnan tulevaisuusvaliokunta



Petteri Uusimaa
1.3.2019

*Lasers and optics for personalized
medicine and better life.*



WE DO LASERS
AND OPTICS
FOR PERSONALIZED
MEDICINE



BETTER LIFE

modulight

Modulight, Inc.

- ❑ Spin off from ORC at Tampere University of Technology in 2000
- ❑ Profitable privately held company with 18 years track record
- ❑ Exclusive supplier to 9 pharmas & world leading cancer centers in USA & Europe
- ❑ Long track record of making all kinds of semiconductor lasers & pumps (400–2000 nm)
- ❑ Certified ISO13485 QMS in 2011, ISO9001 & 14001 in 2002
- ❑ Co-branded & OEM products currently shipping to all continents except Antarctica
- ❑ 600 000 pcs of 9xx-nm pulsed lasers in 2015 for LIDAR



BAUSCH + LOMB is a large US company, listed in NYSE



Life sciences

- ❑ Medical laser systems
- ❑ Oncology
- ❑ Ophthalmology

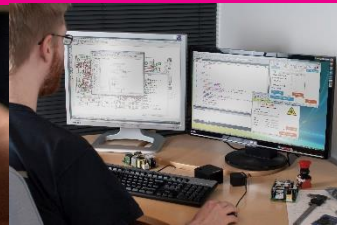
modulight

- ❑ Optogenetics
- ❑ Pharmaceutical safety & testing



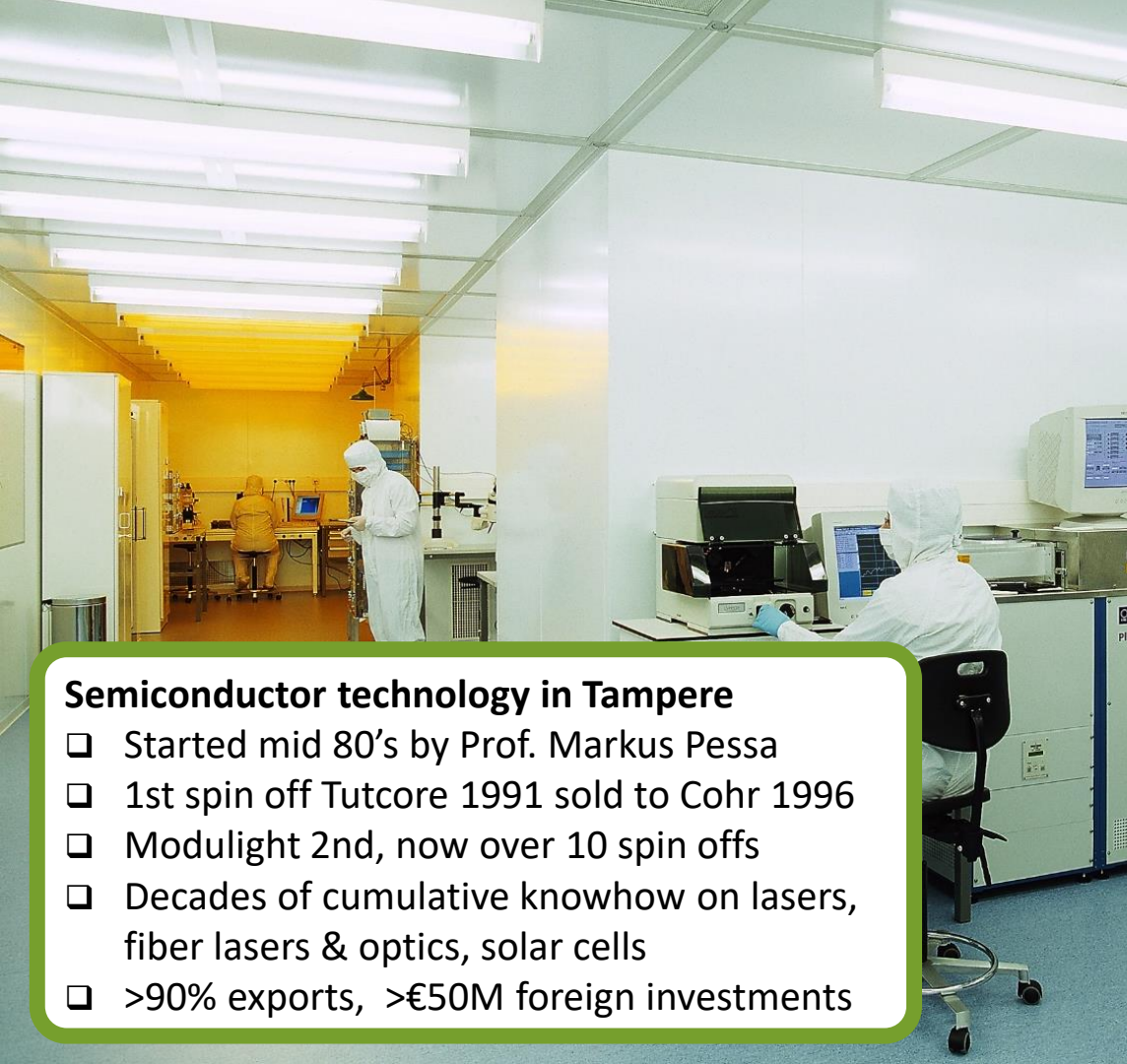
Custom & industrial

Subsystems for challenging optics & electronics • Processing



Services

Regulatory & engineering • Lifecycle support



Semiconductor technology in Tampere

- ❑ Started mid 80's by Prof. Markus Pessa
- ❑ 1st spin off Tutcore 1991 sold to Cohr 1996
- ❑ Modulight 2nd, now over 10 spin offs
- ❑ Decades of cumulative knowhow on lasers, fiber lasers & optics, solar cells
- ❑ >90% exports, >€50M foreign investments

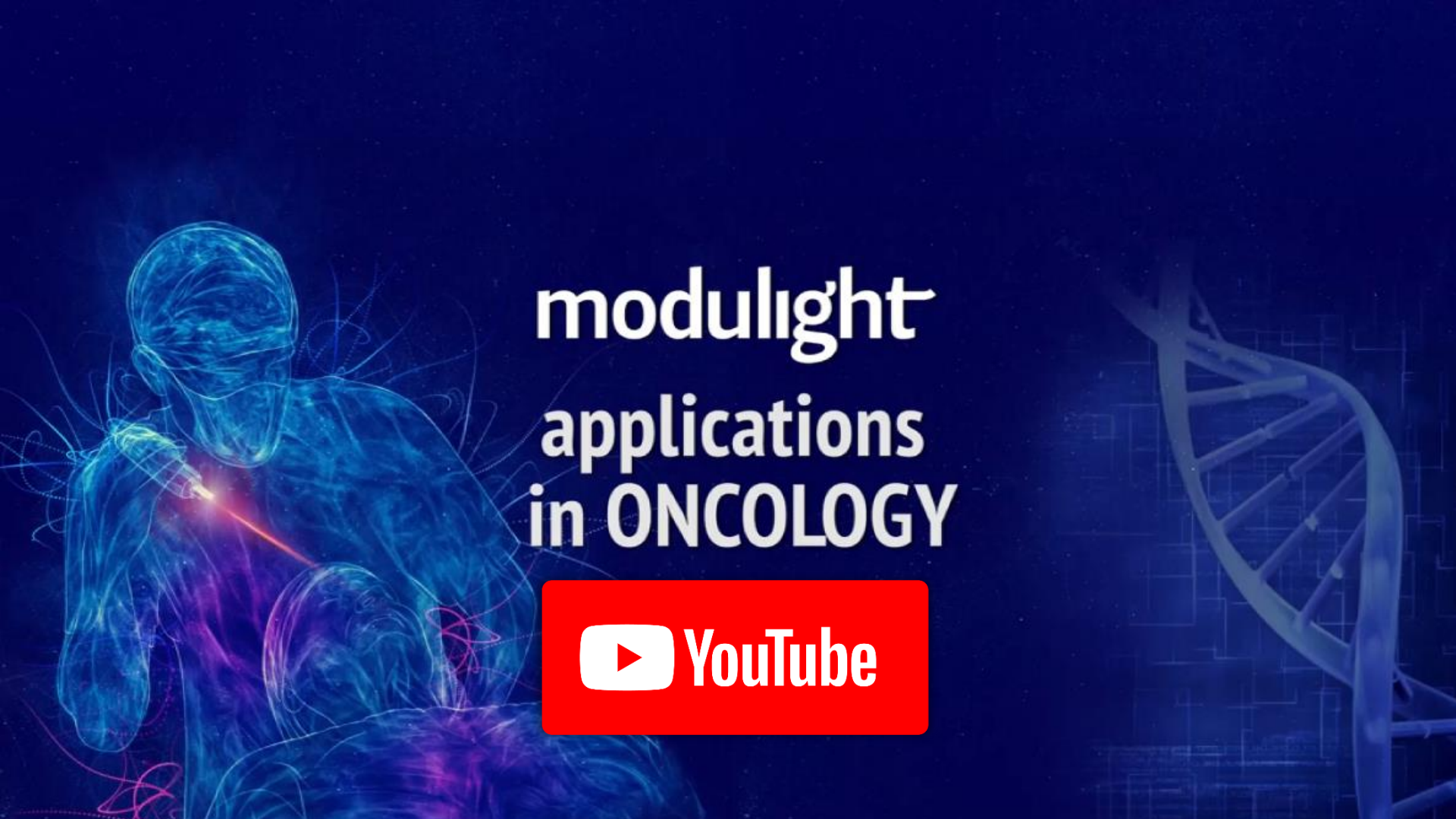
Modulight Capabilities

- ❑ In-house laser production & design – come and see
- ❑ True supply chain control
- ❑ Independence from third party decisions
- ❑ Full traceability to the level not available from competing laser companies
- ❑ MADE IN FINLAND - quality controlled and ethical work place
- ❑ Premises and factory all owned by Modulight
- ❑ Comprehensive regulatory, lifecycle & field support
- ❑ Demonstrated capability to develop numerous laser related products and exceed customer expectations – talk to us for more!

Worldwide laser markets €15B

Medical laser markets €1B

**Surgical, therapy and ophthalmic
laser markets €400M**



modulight applications in ONCOLOGY

 YouTube

Lessons learned

- ❑ Decades of cumulative knowhow and investments in semiconductor technology protect business and employment in Finland
- ❑ Cross field product and technology development maintains unique global competitiveness (laser+medicine, laser+genetics)
- ❑ Finland has to be attractive & supportive to new technologies and clinical studies to ensure utilization of the latest medical technologies





Thank you!
modulight