



RSA studio: ProColi

- *Initial idea*

A new E. coli expression system for production of recombinant proteins based on growth decoupled protein synthesis.“

- *Selected strategy: Spin off model*

Host



Company



- *IPR: Patent based on data generated within the studio*

- *Company concept: Licensing of system incl. scale-able production process & show cases*

- *Customer: Bio –Pharma, Companies in Industrial Biotechnology*



Experiences and challenges

- *University in-kind contribution of 30% was difficult to enforce as overheads limited to 20% (overhead costs for laboratories are much higher)*
- *Main criterion for funding a company → Proof of principle to develop a **scaleable and efficient production process** with the growth decoupled system for direct use in industry.*

Challenges:

- *Not straight forward DEVELOPMENT but still research work*
- *Time lines too tight*
- *Growth decoupled system – Proof of principle not shown within required time span*
- *How to come to a GO – NO GO decision?*
- *Alternative ideas – Riboswitch technology → no fit to the portfolio of our company partner Evercyte but interest from Pharma industry*



Experiences and challenges

Support from FFG and RSA team to make things running

- *Great readiness to discuss problems and to offer flexible problem oriented solutions*
- *Extension of project duration (6 months)*
- *Change to a model somehow in-between spin-off and diversification model (cooperative research contract with pharma company > than required 20% of total project costs)*

→ Base to fund the company (enGenes Biotech GmbH)



enGenes Biotech GmbH



enGenes Biotech is a Customer-Centric, Research & Development Company dedicated to providing Technology Innovations in the Field of Recombinant Protein Production



Funding team:

Juergen Mairhofer, CEO/CSO

Jens Pontiller, COO

Gerald Striedner

Funded in 02/2014

Operative since 06/2014; 5 employees

enGenes lab space is situated at the

Vienna Institute of Biotechnology



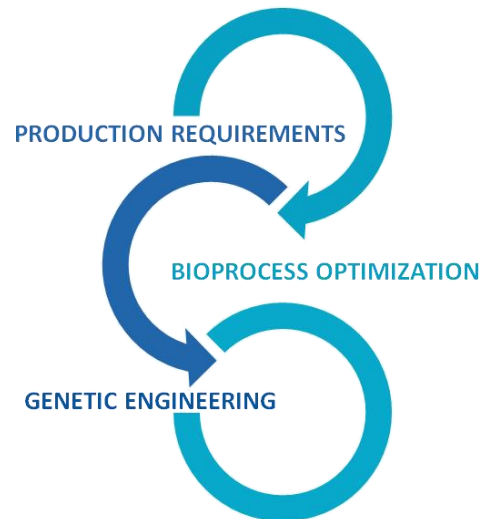


Strategy

Genetic and bioprocess engineering work hand-in-hand to enable production of difficult-to-express proteins

MOLECULAR BIOLOGY

- PLASMID VECTOR DESIGN/ENGINEERING
- EXPRESSION HOST ENGINEERING



PROCESS SCIENCE

- PROCESS & SYSTEMS CHARACTERIZATION
- INDUCTION & FEED STRATEGIES
- ADVANCED PROCESS CONTROL
- MEDIUM DESIGN



Tailor-made solutions for flexible collaboration

Co-development of technologies

- *Shared IP / exclusive access to IP*
Antibiotic marker-free plasmid selection and stabilization system for the production of recombinant proteins

Licensing of enGenes IP

- *enGenes-X-press Technology*
- *Expression vector improvements for non-API production (riboswitch Technology)*

Fee-for-service / Feasibility studies

- *Protein For Research Purpose (mg to g Scale)*
- *Feasibility Studies for Difficult-to-Express Proteins*
- *Process Development*