enterprise europe network

Cyprus Chamber of Commerce & Industry

ERATOSTHENES CENTRE OF EXCELLENCE

Applied Research in Action: Addressing Industry Needs through Academic Insight

Dr Celia Hadjichristodoulou

Founder and Managing Director, GrantXpert Consulting Ltd

Administrative Director, EUC Future Skills Hub

GrantXpert

KEY ISSUES ADDRESSED

BENEFITS THROUGH INDUSTRY-ACADEMIA COLLABORATION

Advantages for young researchers

Advantages for academic/research institutions

Economic and societal impact

TIPS FOR SUCCESS

Best practice examples from Cyprus and abroad

METEOR Horizon project

Ways to further enhance industry-academia collaboration for young researchers' benefit

WHY THIS MATTERS FOR YOUNG RESEARCHERS

- **Access to Real-World Problems**
  - Work on challenges that have immediate industry applications
  - Industry exposure: opens up career pathways in the private and public sector
  - This hands-on experience with real challenges builds key technical and managerial skills
  - Seeing a project go from idea to implementation is highly motivating
- **Funding Opportunities**
  - Industry-sponsored PhDs or postdocs = more resources and visibility
- **Career Development**
  - Internships, mentoring from industry experts and job prospects
- **Skill Diversification**
  - Still engage in academic publishing and also create tangible products/services
  - Learn project management, EU funds, IP law, business models, and communication
- **Networking & Recognition**
  - Present in joint conferences, co-author papers with top R&D engineers
  - More networking opportunities arise from collaboration with companies
  - Exposure to other perspectives

BENEFITS FOR UNIVERSITIES & RESEARCH INSTITUTIONS

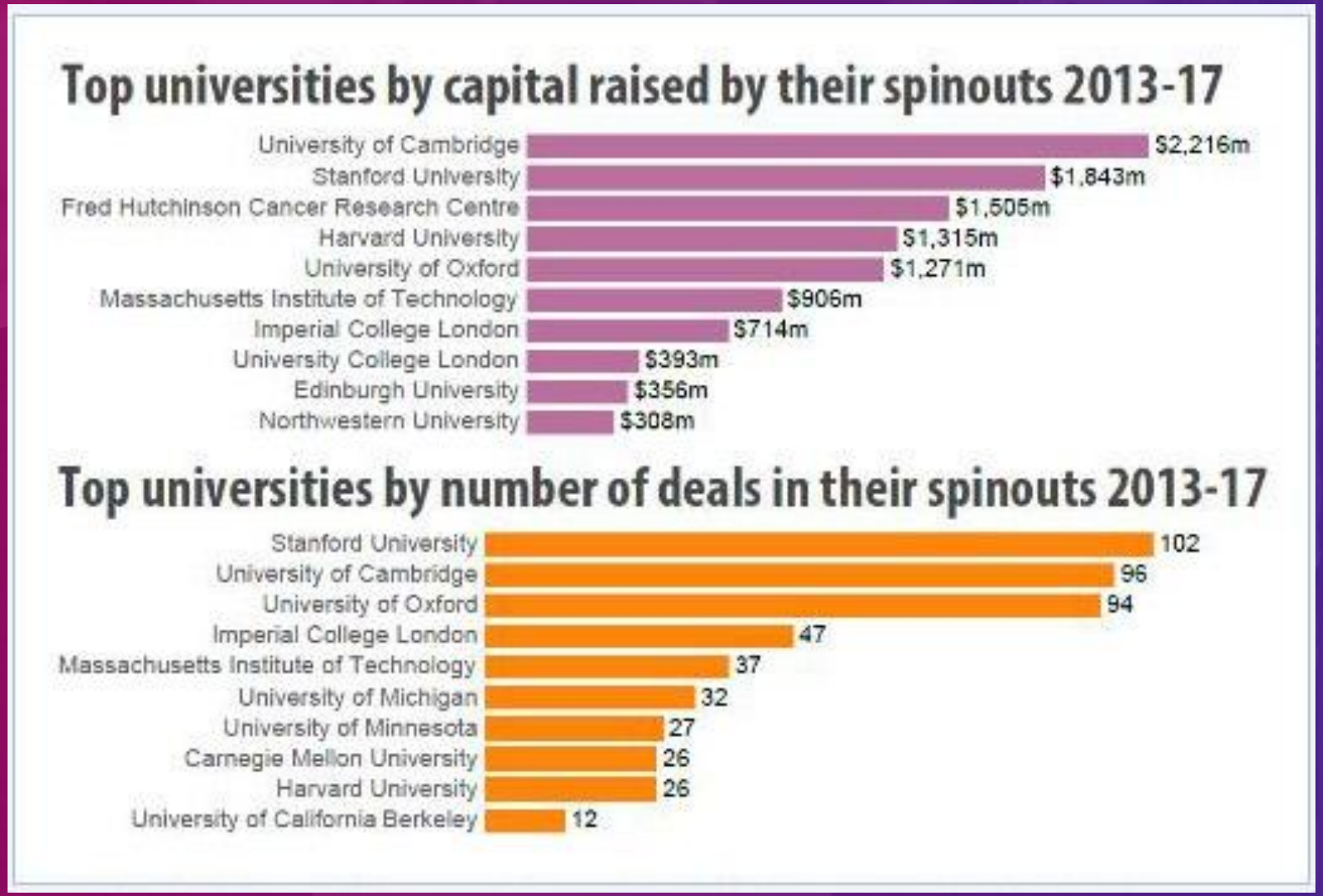
Cash-strapped universities increasingly focus on diversifying their income streams on a global scale
Important source of income for universities from spin-offs: In the UK alone, universities' intellectual property (IP) raised more than £329 million of income in 2021-22, including £86 million from the sale of spin-offs.

Benefit	Details
Economic Growth	Strong ROI on public research funding; spin-outs inject capital and output directly into economies.
Job Creation	High-skilled jobs in tech, biotech, deep tech, and support services.
Innovation Pipeline	University labs become sources of proprietary technologies and new companies.
Attracting Investment	Large-scale funding, both private and public, flows into regional ecosystems.
Societal Impact	Links created between universities with local businesses. Real-world solutions: fusion energy, health diagnostics, sustainable tech, AI systems, etc.

BROADER ECONOMIC & SOCIETAL IMPACT

- Bridge academic theory and commercial reality—exactly what benefits both economy and researchers.
- **Global fundraising has skyrocketed**: University spin-outs raised more than **$158 billion** across 8,042 investments from 2013 to 2022
- In **2021**, spin-outs received a record **$39.3 billion**, a 72% increase over 2020
- **University of Oxford** spin-outs boast a cumulative valuation of around **£6.4 billion**, with Imperial College (£2.7 billion), Cambridge (£2.6 billion), and UCL (£2.6 billion) following closely
- **Cambridge University** spin-outs alone have raised over **£4 billion in funding** and employ more than **70,000 people**
- **University of Surrey example:** Surrey Research Park, which hosts about 200 businesses, including start-ups, and connects them to the university. Greatest commercial success story is Surrey Satellite Technologies Limited, a satellite engineering company first founded as a university spin-out in 1985, which was acquired for £50 million in 2008. The company's headquarters are still based in the research park.
- **Job creation**: Over **80,000 direct jobs** from Russell Group spin-outs; thousands more across all UK spin-offs.
- **Economic output**: Academic spin-out activity in the UK generated an estimated **£62.8 billion**—a near **£10 return per £1 of public funding**.
- **Long-term innovation**: Many spin-outs take 7–15 years to mature, especially in deep tech and biotech—infusing high-risk, high-reward research into real-world solutions
- **Attraction of private capital**: Spin-outs draw significant VC investment—e.g., MIT's Commonwealth Fusion Systems secured **$1.8 billion in Series B** nvestment from VCs to build commercial fusion reactors

BROADER ECONOMIC & SOCIETAL IMPACT



SUCCESS STORIES/BEST PRACTICES

Innovation Offices/TTOs

MIT Licensing Office

Entrepreneurship Hubs/Spin-off support

Imperial Enterprise Lab

Open Innovation

ETH Zurich industry grants

Strategic Partnerships

Cambridge-AstraZeneca

Joint R & D Labs

Stanford-Google

University Chairs created by companies

BMW Group-University of Munich

GOOD PRACTICE: STANFORD MEDICINE-GOOGLE

Stanford MEDICINE News Center

Topics A-Z Latest Articles

Stanford Medicine / News Center / Latest Articles / Stanford, Google team up on health data

Stanford Medicine, Google team up to harness power of data science for health care

By Jennie Dusheck

Stanford Medicine will use the power, security and scale of Google Cloud Platform to support precision health and more efficient patient care.

GOOD PRACTICE: UNIVERSITY OF CAMBRIDGE-ASTRAZENECA

UNIVERSITY OF CAMBRIDGE

Blue-skies research | Developing research talent | Diagnosing disease | Getting drugs to patients | Improving drugs | Cambridge ecosystem | Working together

funding more than 70 PhD students at Cambridge. One of these is Helena Rannikmae who is studying a particular gene to understand its role in bowel cancer.

As well as getting what she describes as "great support" from her industrial supervisor, Helena sees other benefits from being funded by AstraZeneca. It has put her in touch with different people both in the company and across the University and it's that exposure to other perspectives that she found particularly valuable.

> *"I definitely think my PhD would have less impact without AstraZeneca's input. They really pushed me both in terms of the underlying biology and in thinking about its long-term application."*
>
> — Helena Rannikmae, PhD student funded by AstraZeneca

GOOD PRACTICE: BMW-UNIVERSITY OF MUNICH

press.bmwgroup.com/global/article/detail/T0335292EN/cutting-edge-research-into-quantum-computing:-bmw-group-and-technical-university-of-m

Cutting-edge research into quantum computing: BMW Group and Technical University of Munich agree to create an endowed chair in "Quantum Algorithms and Applications".

16.06.2021 PRESS RELEASE AGED

+++ €5.1 million for TUM professorship, equipment and personnel +++ Bridge between outstanding research and industry application +++ Great potential of quantum computing for optimisation problems +++

#Technology

GOOD PRACTICE: UNICORN SPIN-OFF VALUED AT 1BILLION DOLLARS

Technical University of Munich

NEWS AND EVENTS | STUDIES | LIFELONG LEARNING | RESEARCH | INNOVATION | COMMUNITY | ABOUT TUM | DE | EN

Start-up company Celonis valued at 1 billion dollars

The first “unicorn” from TUM

Celonis has taken its place among the “unicorns”, as the world's most successful start-ups are known: The spin-off from the Technical University of Munich (TUM) has been valued by investors at 1 billion dollars. Celonis offers process mining software that can analyze any digital business process. TUM is considered one of the top universities in Europe for promoting start-up founders.

GOOD PRACTICE FROM CYPRUS

- In November 2020, Malloc received an initial €100,000 pre-seed grant from RIF.
- Initial traction of 30,000 active users within the first month of launching the app
- In May 2021, Y Combinator, the top accelerator in the world with a 2% acceptance rate, saw Malloc's potential, invested in the company, and enabled it to receive almost US $2 million in an oversubscribed seed round in September 2021

KIOS
Research and Innovation Center of Excellence

University of Cyprus
IMPERIAL

About Us | Research | Innovation | News & Events | People | Careers

Maria Terzi

CEO & Co-Founder of Malloc Inc.

maria@mallocprivacy.com

Dr. Maria Terzi is the Co-Founder and CEO of Malloc – a privacy and data security startup focused on detecting spyware and preventing unattended data recordings or transmissions in mobile devices, that has been backed by Y Combinator and received almost $2M seed investment (August, 2021).

Maria holds a BSc in Computer Science and a Ph.D. in Machine Learning and Recommender Systems from the University of Lancaster, funded by EPSRC. She has previously worked at Google (Zurich), the KIOS Research and Innovation Centre of Excellence, the Cyprus University of Technology and the University of Cyprus, among others. Maria has won two Google hackathons (London 2011,2012), she was selected as a finalist Women TechMakers Scholar (2017), she was nominated for the Woman of the Year award at the Innovation Track (MF Awards 2020) and she was selected as a Secure and Private AI scholar by Facebook (2020). Maria is also the organising team of hack{cyprus} contributing to the evolution of the tech ecosystem in Cyprus.

GOOD PRACTICE FROM CYPRUS: FOODFLOW (AI-POWERED FOOD WASTE TRACKING FOR PROFESSIONAL KITCHENS)

GET A QUOTE

FREE FOOD WASTE AUDIT

METEOR-HORIZON EUROPE PROJECT LED BY EUC

- **METEOR – Methodologies for Teamworking in Eco-outwards Research –** is a **Horizon Europe** project that aims to strengthen the **transversal skills** of doctoral students and early career researchers through an innovative, collaborative, and participatory training program, including summer schools, group projects, and peer mentoring.
- These **transversal skills** include:
  - teamwork and cross-disciplinary collaboration
  - research project design and management
  - communication across academic and societal contexts

➢ **Overall Aim:**
Equip researchers with competencies to thrive in **academia**, the **public sector**, and **industry**.

➢ **Who can participate?**
Approximately **300 PhD students and early-career researchers** will be selected for this phase of the project

Findings– Employers' Perspectives

- Employers prioritise soft skills: communication, teamwork, time management, autonomy, adaptability, and self-leadership.
- Professional skills are also crucial: critical thinking, problem-solving, project management, academic writing, grant applications, knowledge of EU programs
- Integrate practical experience through internships, placements, and interdisciplinary projects.
- Stronger academia–industry collaboration is needed, including guest speakers, company visits, and co-creation of services/products.
- Career preparation should include realistic training on alternative career paths beyond academia.
- Dual career readiness is essential, combining academic and private-sector skillsets.
- Overspecialisation should be addressed through interdisciplinary learning and science communication training.
- An entrepreneurial mindset is highly valued—supporting innovation, startup thinking, and the ability to translate research into societal or commercial impact.

In-Person METEOR Academies

- METEOR includes **two rounds of funded in-person Academies** (similar to summer/winter schools), complementing the online training programme.

- **Duration:** Each Academy lasts **5–6 days**
- **Format:**
  - Team-based, interdisciplinary learning
  - Participants work in international peer groups
  - Supported by academic mentors
- **When & Where:**
  - First round: Jan 2026 – Feb 2026
  - Second round: Feb 2027 – May 2027
  - Held in **10 different locations**
- **Costs:**
  Travel and accommodation **fully reimbursed.**

- These Academies offer hands-on experience in developing innovative research proposals with real-world impact.

Submit your interest for participating at the Academies here

Contact for further information:
Prof. Loucas T. Louca- European University Cyprus
L.Louca@euc.ac.cy

Methodologies for teamworking in eco-outwards research (METEOR)

TIPS FOR YOUNG RESEARCHERS

- **Balance**: Ensure your academic freedom is respected in collaborations.
- **Entrepreneurial mindset:** Participate in hackathons, entrepreneurship competitions, incubators/accelerators, EU funded projects (EIT, Marie Curie Doctoral Networks)

Be proactive: engage with your institution's innovation office

Think beyond publishing – aim for impact

Spin-offs = funding, skills, purpose, and potential equity

Help shape the future with applied research

Your ideas can become the solution to industry's challenges in the future

THANK YOU!

Dr Celia Hadjichristodoulou
celia@grantxpert.eu, 22669266