

Symposium
**„Ways of successful science,
technology and innovation
cooperation between Europe and the
USA“**
23-24 April 2012, Vienna

Peter ERTL/ Senior Scientist
AIT Austrian Institute of Technology GmbH

A scientist's view on cooperation

- As a scientist, I **DO NOT** care about:
 - Legal frameworks, letters of intent, IP issues
 - Administrative procedures or financial agreements
 - Mutual access, reciprocity and balanced participation within the collaboration scheme
- Once **FUNDING** is available
 - All administrative issues can be solved (including legal)
- However, to get funding, a researcher needs:
 - Preliminary data
 - Commit already limited financial and personal resources for high-risk collaborative projects
 - Joint-publications (to demonstrate successful collaboration)

A critical view on AT-US cooperation

- Most Austrian institutions do not foster cooperation
 - No visibility, no incentives (for career advancement), no money
- Research projects do not support it
 - No room for extended research stays to explore new ideas
- No funding advantage
 - Funding is European centered
 - If available, funding rates are quite low
 - Decision times are long
- Austrian scientists compete with and operate within Austrian/European scientific community
- Transatlantic cooperations are a burden on limited resources, high-risk and difficult to maintain

Benefits of AT-US cooperations

- What is the win-win situation?
 - Name recognition is not enough
 - Strategic scientific synergism
 - Global competency is a must
 - Competitive advantage within Europe
 - Career advancement
- Decrease research costs by a factor of 2
 - Additional lab space and access to instruments
 - Project cost at 75kEuro per year (35kEuro PhD & 35k instruments, material and etc.).
- Increase research output by a factor of 3
 - Joint publications and technology transfer
 - Novel research ideas and concepts
- Access to global scientific networks

US views on international cooperation



Prof. Richard A. Mathies

Dean, College of Chemistry

Gilbert Newton Lewis Professor

Director, Center for Analytical Biotechnology

University of California at Berkeley



- Interview with Prof. Mathies on international collaborations
 - “Relationship-building, relationship-building and relationship-building...”
 - Funding for people with ideas not just projects (exchange of people)
 - UC Berkeley wants to increase the number of international scholars
 - Frequent invitations from Asia (Beijing, Hong Kong, Singapore) to set up collaborations
 - UCB provides existing facilities and technology in exchange for funded visiting scientists
 - Decrease research costs while increasing scientific output
 - Transfer of money (across countries and institutions) is difficult

US views on international cooperations



Prof. Adam T. Woolley

Associate Chair

Department of Chemistry and Biochemistry

Brigham-Young University



- Conversation with Prof. Woolley after seminar talk
 - Funding for international collaboration is difficult
 - Joint funding requires coordination between two funding agencies
 - Different missions, directives etc
 - Existing low funding rates and “two-body problem” further decrease funding possibilities
 - One agency funds both partners
 - US agencies do not usually fund research in other countries
 - Select synergies, cross-training through student exchange

US Views on AT Cooperations

UCSF Medical Center



Prof. Georg M. Wieselthaler, MD

Director and Surgical Chief of Cardiac Transplantation and Mechanical Circulatory Support at UCSF
University of California at San Francisco

- Discussion with Prof. Wieselthaler following seminar presentation
 - Joint projects need to fall within US funding topics
 - Basics of cooperation is relationship-building
 - Understanding the needs of partner requires ongoing discussions
 - International networkworking can foster collaborations

How to set up a collaboration

- Prof. Mathies (UCB)
 - Invitation to discuss collaboration ideas
 - UCB research facility in exchange for funded scholars
- Prof. Woolley (BYU)
 - Support frequent travel for US scientists/engineers to AT and travel for AT scientists/engineers to US
 - Co-training of students to combine synergies
 - Face-to-face meetings
- Prof. Wieselthaler (UCSF)
 - Funding is a must
 - For interdisciplinary collaborations, need networking (ASCINA)
 - Lobbying for international collaborations

My Observations

- Support of the home institution is essential
 - How to jointly generate enough preliminary data?
 - How to stretch limited financial and personnel resources?
- Win-win situation
 - Transfer of new ideas and concepts
 - Decrease research costs
 - Increase research output
- Bottleneck
 - Lack of sufficient funding for active academic exchange
 - Low recognition and standing of international cooperation
 - Little incentives to collaborate outside Europe
 - High risk of failure