

Trip to Hungary April 29 – May 3, 2007

Participant Feedback and Follow up

General Conclusions

A Cleveland contingent of 10 people traveled to Budapest, Hungary to understand the bioscience business landscape, explore opportunities, and forge relationships with companies and organizations that support this industry. The participants found a highly educated population, promising R&D, the beginnings of technology innovation and entrepreneurship, and a great low-cost access point for bioscience companies into the European Union. The following comments serve as feedback from the Cleveland participants and can be used to follow up in Hungary and explore opportunities in other countries.

Opportunities In Hungary

Participants felt the trip met or exceeded their expectations in discovering promising bioscience opportunities in an emerging market country.

BioEnterprise - current opportunities:

1. Assist BioEnterprise supported companies in finding low cost, EU capable contract development partners in Hungary (clinical, product development, manufacturing and distribution).
2. Assist Hungarian clinical research service companies in setting up U.S. sales and marketing offices.
3. Advise Hungarian tech incubators and organizations in setting up accelerators and capital networks.

Future opportunity: partner with companies to access the technology companies emerging in Hungary.

Case Western Reserve University:

1. Continue to develop relationships with Hungary so that CWRU spin-off companies and technologies can access the European marketplace.
2. Work with Hungarian university technology transfer programs to accelerate their ability to commercialize technologies, ultimately providing CWRU with access to promising technologies.

Cleveland Clinic:

1. Utilize the existence of companies such as Amgen and Pfizer that have clinical trial participants in Hungary to connect Hungarian physicians to the new Global Cardiovascular Innovation Center as consortium projects move from research into human trials.

2. In the coming months, identify cardiovascular experts in Hungary with novel ideas that can be converted into technical inventions, patented, and then moved forward into commercial markets.
3. In the future, develop clinical relationships with additional Hungarian physicians.

Brown:

- Work with Riverside and other venture capital and private equity companies to identify companies that have interest in and capacity to open operations in the U.S.

Meeting Itinerary

All participants felt that the meeting itinerary helped assess opportunities and gave a window into the potential of the country as follows:

- Because most participants were not familiar with the country, meetings which focused on the economy and the business landscape were key and provided a much needed baseline for assessing opportunities.
- The company-specific meetings set up by Riverside were productive, but other company presentations were slightly premature. However, they did provide a more detailed view into the early level of innovation and tech transfer.
- University meetings revealed promising R&D and how participation by Cleveland-based companies could bring these institutions up to speed to commercialize technologies.
- BioEnterprise would have liked more meetings with private investors and fast growing health care companies such as Diatron.
- With additional time, Cleveland Clinic would have preferred more meetings with top-flight physician-scientists to drill deeper into the cardiovascular aspect of the Hungarian science and technology landscape.
- Since the trip, Cleveland Clinic also discovered other Hungarian companies they might have called on.

Tech Transfer at the Universities

In general, the participants felt the formal system of tech transfer at the universities is in its infancy and could benefit from a U.S. partnership, with the following observations:

- Great science, however in most cases offices and staff have been only really operating for a year or so which is the reason for the lack of tech transfer.

- On average, the universities are 5 to 10 years behind top-tier American, Israeli, or western European institutions.
- NEO organizations can serve as advisors to guide the universities on formal boards and set up training exchanges within Case Western Reserve and Cleveland Clinic.
- With some initiative the universities can easily borrow from the experience of hundreds of other institutions that have traveled the same path; however, they will need to be discerning and attempt to gain in-depth knowledge on up to half a dozen models.

Next Steps

All three participant organizations, BioEnterprise, CWRU, and Cleveland Clinic will make themselves available to form and participate on advisory boards to assist in the development of a robust Hungarian technology transfer model. In addition, NEO should continue to firm relationships with the US Embassy and staff in Hungary, the US Commercial Services, and the National Guard.

BioEnterprise

- Evaluate companies as they are provided from Hungarian contact Arnold Feher, Managing Director of Convincive, a consulting firm that will act as a filter.
- Make U.S. connections for various firms who need to find collaborating partners or investors. Examples are DSS, a bioinformatics consulting firm that helps technology organizations, Primus Capital Partners and ValTech, investment firms that are currently raising international funds to invest in Hungarian early stage companies, and the Hungarian Biotech Association, an organization that helps biotech firms find funding.
- See if blood analyzer company, Diatron, is interested in US distribution
- Invitations have been sent out to Hungarian participants for the BioEnterprise Global Venture Capital Conference in June 2007.
- Explore signing an MOU with BioOhio and the State of Ohio for support between Ohio and Hungary.
- Join Hungarian advisory boards where relevant and help Hungarian companies find commercial and clinical advisors in our network (ongoing).
- If all successful and momentum continues, think about finding an liaison who would identify deals in the Hungary similar to what Avshalom Horan does in Israel.

CWRU:

- Offer a Resident Affiliate Program in Technology Transfer at CWRU to the Hungarian Universities/Institutions.
- Present various topics at the Hungarian venture conference in November 2007.
- Meet more individuals from Pecs University via video conferences.
- Serve in an advisory capacity to assist in building the technology commercialization infrastructure in Hungary.

Cleveland Clinic

- Barry Smernoff, PhD is working with the Cardiovascular Health Center will follow-up with some of the key Hungarian organizations.
- Hoping that by July, we can begin to shape an initiative for Cleveland Clinic to work more closely with a small group of Hungarians.
- There is real interest in expanding the dialogue regarding a Cleveland Clinic relationship or presence of some kind in Hungary.

Other observations / improvement

- All participants felt that the size and make-up of the group was accurate and for the purpose of the trip, however it might have been interesting to have someone from an investment organization or bank.
- Some participants felt that the Hungarian counterparts were not altogether clear on our mission. Future meetings should ensure the participants' understanding of our background, experience, and why we were there.
- Define the objectives for each participant/organization as early as possible. This will help the host country mobilize quality support within their organization and to determine appropriate businesses to meet.
- The document regarding the Cleveland participants' goals including short bios was the single most useful item for the host country coordinators when securing meetings.

Quotes from Ambassador April Foley

"I was extremely impressed with the caliber and professionalism of the Cleveland business delegation, and I know that the Hungarians were delighted to exchange ideas with this accomplished group of visitors."

"I am certain there is enormous potential for collaboration in a number of areas, particularly bio-science research and development, where Hungary has a strong tradition of excellence and is making new strides," she added.

"Prominent Cleveland institutions, like the Cleveland Clinic and Case Western Reserve, possess exactly what Hungary needs -- expertise in the commercialization and marketing of new, innovative technologies. This partnership has the makings of a real 'win-win'."

Hungary Trip Meeting Contacts

Monday, April 30th

- Samuel Dean, Major, Ohio Army National Guard

US Commercial Services Office

- Stephen P. Knode, Commercial Attaché
- Michael Hurley, Conselor of Public Affairs
- John McGuire – Economics Office
- Bradley Wilde – Consular Affairs
- Nicholas Griffith – Political Office (Nick has moved to another Embassy)

- Mr. Istvan Molnar - Managing Director, Biopolisz Kft. (Szeged University)

- Ambassador April Foley, U.S. Ambassador to Hungary

Wednesday May 2nd

- Ferenc Vidovszky, Partner and Balazs Tahy, Vice President, Riverside Europe

- Arpad Gyetvai, Diatron, Chief Technology Officer

- Mr. Gusztáv Bienert - AMCHAM President

- Marcell Veidner – Board member of the Hungarian Biotech Assn and Director of PCA Capital Advisors

Biotech research institutes & universities

- Tamas Bardos, MD, U. Pecs, Dept of Orthopedic Surgery
- Geyorgy Pokol, BUTE, Dean and Prof. of Chemistry
- Miklos Boda, BUTE, Advisor to the Rector
- Laszlo Dvorszki, BUTE, Department of Scientific Relations
- Marositsne Moldvay Rita, BUTE
- Peter Nemeth- Dean of Medical School, U of Pecs
- Tamas Bardos- orthopedic surgeon, Pecs, Hungary
- Kata Dobay- Tech Transfer- U of Pecs
- Laszlo Matyus- Genomnanotech, U of Debrecen, Professor of Biophysics
- Janos Mink, Hungarian Academy of Sciences, IT Faculty
- Zsofia Nemeth, ITD Hungary, Consultant
- Patricia Gonzalez, Commercial Counselor, US Embassy

Thursday May 3rd

- Arnold Feher- Convincive Consulting, Managing Partner
- Laszlo Veress- DSS Consulting, Innovation Consultant
- Balazs Erdei- National Office for Research and Technology
- Panna Zsigmondi- ITD Hungary, Business Intelligence
- Attila Mesko, Hungarian Academy of Sciences, Sec-General
- Tobias Mansel-Pleydell, Concorde Corp Finance Ltd., Managing Partner
- Tamas Bene, U. Debrecen, Legal Advisor