

ACTION 1:
FURTHER ACTION ON THE FOLLOWING INITIAL CONTACTS REPORTED IN JUNE
SPECIAL OPPORTUNITY: HUNGARIAN MEMBERSHIP IN ACTION

1. Hungarian involvement in the Association of University Technology Managers (AUTM)¹:

- The Hungarian side is strongly encouraged to write to Dr. Kevin Croft expressing their interest in AUTM's work and activities. Dr. Croft, who is currently in Australia, is anxious to meet with Hungarian participants in order to increase Hungarian involvement in AUTM. Dr. Croft's contact information is as following:
Kevin W. L. Croft
Vice President for International Relations
Association of University Technology Managers
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- Dr. Croft will have AUTM meetings in Oxford, England on December 4-6 and will visit Switzerland. He would be glad to stop in Budapest during this period to meet with both government and interested university officials in Hungary in order to get the activity organized and moving forward. It is recommended that the Hungarian side invites Dr. Croft to visit Budapest as a part of the above noted letter.

2. The Hungarian side is welcomed to participate in the March meeting in Orlando, Florida, which will include about 1,700 participants from around the world:

- There are approximately 15 working groups focused on such areas as Biotechnology, University Laboratory Cooperation, Intern Cooperation, Pharmaceutics, Software Multimedia, Regional Economic Development, Intern Technology Transfer Survey, Career Development and Technology Transfer, Venture Capital Technology Transfer, etc.
- They put up publications (*Technology Transfer Manual* from AUTM), educational series, a periodic journal and newsletter.
- The web site for AUTM's March event is:
<http://www.autm.net/events/dsp.eventDetail.cfm?eid=12&mode=current>.

3. Dr. Gail Cassell, Vice President of the Scientific Affairs and Distinguished Research Scholar for Eli Lilly, suggested to use the database of the National Institutes of Health (NIH), which shows the transfer technology activity in each institution in the United States, in order to gain access to two pieces of helpful information in identifying those institutions that the Hungarian side would want to be linked with:

¹ AUTM's mission is to promote support and enhance global academic technology profession through internal and external education and training. This is largely a US-based organization, but it has grown rapidly through the international community of universities and governments. Now there are 35 countries involved in AUTM, and there are several participants already from Hungary and Czech Republic. The goals involve creating a broader understanding of technology transfer process, developing and promoting best practices and making AUTM increasingly an international organization. The current president is Mark Crowell, who is at the University of North Carolina in their office of technology development.

- Identify and pick out 25-35 institutions funded by the NIH and their areas of expertise in terms of research, which could be found in the database.
- Look through the AUTM's annual survey and choose those leading institutions—universities and laboratories—that have been the most productive and experienced in technology transfer.
- Select those institutions that match several of your areas of expertise in Hungary and are your strengths.
 - Dr. Cassell identified the National Institute of Allergy and Infectious Diseases as an example of one of the institutions mentioned above. This institute will be opening PMP manufacturing facility for vaccines on the NIH campus; it also has a free standing research institute.
 - It could be helpful to get in touch with Barney Graham, the physician in charge at the National Institute of Allergy and Infectious Diseases, and discuss the issues of diagnostics and biologics.

4. Organization of a brief trip of Hungarian representatives to visit several of the institutions identified after the search of the NIH database. This group of specialists would spend approximately two days at each of these sites, learn about their best practices and try to match up some collaborative projects:

- The possibility of establishment of bioclusters in Eastern Europe and/or Europe. As Dr. Cassell mentioned, there are several bioclusters in the United States; they can be described as incubator facilities. One such facility is located at Purdue University and is called Discovery Park.
- Dr. Cassell and Dr. Chuck Wessner invited the Hungarian specialists to participate in their on-going activity in terms of evaluation of small business grants program that they think to suggest to federal agencies of the United States as far as promoting technology transfer. They are now embarking on a study to compare innovation practices around the world and initially focusing on Asia. Such activity may take place in Washington, D.C.

ACTION 2:
FOLLOW-ON ACTIONS TO CAPITALIZE ON EMERGING JOINT AGREEMENT

1. Ms. Pace Lochte of the University of Virginia identified several opportunities open for Hungarian specialists to participate in events initiated and supported by the University of Virginia:

- The Hungarian side is welcomed to take advantage of the offer from the Technology Transfer office at the University of Virginia, which has offered an internship to anybody to come and spend several weeks learning how the Technology Transfer office performs technology transfer at the University of Virginia².
- The Hungarian side is encouraged to look into the Northern Virginia Technology Council's (NVTC)³ work. This association can bring in companies from Hungary, which want to establish their presence in the United States.
- The Technology Transfer office at the University of Virginia hopes that Hungary will be able to contribute toward the initiative of pairing up Hungarian and US researchers for the project that is going to be the cornerstone of their cooperation with Hungary.

2. Mr. Michael Hale, Manager Director of International Affairs with the Global Biosecurity Group, informed on his progress with Dr. Urge in developing a coordinated approach on partnership and starting a scientific entrepreneurship:

- Mr. Hale advised that the American side needed to have a much deeper understanding of the work being done now, which has been done and which is being planned in Hungary with respect to innovation.
- Mr. Hale is convinced of the importance of folding new ideas in a meaningful, structural and positive way toward the excellent initiatives that are currently underway in Hungary.
- Mr. Hale suggested incorporating some of the currently existing Hungarian projects of entrepreneurship into another initiative that the International Biosecurity Group is in the process of undertaking now. They mainly focus on early stages on seed capital and offer support to the development of scientific entrepreneurship in Hungary—such is their outcome and recommendation.

3. Mr. Francis Skrobiszewski from Booz Allen Hamilton provided some additional information regarding the exchange programs for Hungarian professionals:

² Andras Roboz commented regarding the program exchange opportunity for a Hungarian expert to come to the Technology Transfer office at the University of Virginia and get a certain work experience there: they are very enthusiastic about the offer, but the Hungarian side cannot afford it this year due to budgetary constraints; nevertheless, they are very optimistic about such trip for next year (possibly in January or February).

³ NVTC is the membership and trade association for the technology community in Northern Virginia and is the largest technology council in the nation. NVTC has more than 1100 member companies representing about 160,000 employees. Its membership includes companies from all sectors of the technology industry. NVTC will continue to be the nation's leader in providing its technology community with networking and educational events, specialized services and benefits and public policy advocacy among other goals.

- Mr. Skrobiszewski is willing to connect the Hungarian side to the Hungarian-American Enterprise Scholarship Fund's office in Budapest.
 - This fund was established by Booz Allen Hamilton and has been managed by the Council for International Education Exchange with its office in Budapest. The Budapest representatives oversee the entire process of selecting recent graduates, placing them in US companies and institutions and providing grants up to \$2,000 per month.
- There is also a fellowship for more established professionals who have a program they design and want to come to the United States to elaborate it with particular institutions. However, these professionals need to provide their own funding.

4. Dr. Gail Cassell brought the US-Japan program in cooperative medical sciences as a relevant example of countries' cooperation on health research. Both US and Hungarian sides might want to consider the following type of structure for promoting long-term interaction. The program is successful for two reasons:

- 1) It is composed of and designed around the major areas of interest between two countries—cancer and infectious diseases;
- 2) Committees of many kinds are formed around these major topics of interest. Steering committee, which oversees the whole program and has government officials represented, is populated by other committees formed of investigating scientists and physicians who help drive the cooperation. The funding for that program is minute, but the approach of bringing scientists together has worked well.

- More information about the US-Japan Cooperative Medical Science Program can be found at the following web site location:

<http://www3.niaid.nih.gov/about/organization/odoffices/oga/usjapan/>.

5. Mr. Jose Baca, Task Manager at the Air Force Research Laboratory, presented steps and opportunities to participate in the Air Force Research Laboratory (ARFL) Research and Development Program:

1) Air Force Office of Scientific Research (AFOSR) would welcome Hungarian expression of interest in Broad Agency Announcement's (BAA)⁴ areas of research related to Information Technology and Biotechnology.

- The Hungarian side will need to identify specific researchers, their institutes and contact information in addition to their research topics areas, funding agency and copies of recent published research papers.
- AFOSR program managers will assess papers to determine level of interest to begin the process to explore opportunities for cooperative research. The exploratory process could take the form of 1-2 day workshop with a presentation of papers and in-depth discussions on forming mutually agreeable arrangements.
- Mr. Baca will coordinate the material with the appropriate Program Managers in AFOSR. His contact information is as follows:

⁴ The BAA is a tool/mechanism to identify research areas of mutual interest and support that could be considered for possible cooperation.

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2) The AFOSR Window on Science Program (WOS) invites the Hungarian participation in their program. The WOS Program sponsors foreign scientists and engineers to visit and present their research activities at U.S. Air Force (USAF) and other Government research organizations. These visits are often the forerunner of future research contracts or grants from the USAF.

- AFOSR's European Office of Aerospace Research and Development (EOARD) detachment in London, United Kingdom funds visits by distinguished foreign science and technology researchers to U.S. Air Force Laboratory sites and other research organization. These visits provide the opportunity to introduce their research to USAF scientists and to begin to build partnership of excellence and relevance.
- Dr. Paul Losiewicz, the EOARD Program Manager for Information Technology (IT) is currently available to come to Hungary in the November-December 2005 time frame and make visits to Hungarian IT institutes and meet with their leading researchers. Dr. Losiewicz plans to meet with Dr. Lorincz (Eotvos Lorand U.) and several others.
 - Dr. Losiewicz's contact information is as follows:
Telephone: 011-44-20-75114-4474 (London number)
Email: Paul.losiewicz@london.af.mil

3) The Hungarian side is welcomed to attend the U.S. Tri-Service Information Technology Workshops (Air Force/EOARD – Army/USAITC-A – Navy/ONR Global). These workshops will be international in content and participation, and it will be by participation only. The end goal is to present to the Defense Advanced Research Project Agency (DARPA) a concise characterization of a cross-discipline problem area suitable for a Grand Challenge. If there is an interest to participate in one of the workshops, contact Dr. Losiewicz by email or during his visit to Hungary.

- The first workshop will be in Birmingham, United Kingdom on 3-4 November 2005, and it will focus on Communication Networks and Complexity.
- The second workshop is scheduled to take place in Lausanne, Switzerland in February-March 2006 time frame, and it will address the Bio-inspired Networks and Complexity.
- The final workshop is planned for Budapest, Hungary, and it will focus on the Social Networks and Complexity. The anticipated date is expected to be April-May 2006.
 - In Hungary, the point of contact should be Dr. Lorincz in recognition of his outstanding research in the social field of Information Technology. Dr. Lorincz will be attending the first workshop on communications network as well.

Note: Dr. Vass stated that the Hungarian side will follow-up to identify and involve other Hungarian organizations and individuals in this US Air Force program.

ACTION 3:
IDENTIFY THOSE PROGRAMS THAT WILL IMPROVE INNOVATION AND
COMMERCIALIZATION AND WILL BE OR ARE BEING UNDERTAKEN BY HUNGARY

1. Dr. Charles Wessner and Dr. Shivakumar from the National Academies will welcome an invitation to Hungary to help involve Hungary in the Small Business Innovation Research (SBIR) program.

- Dr. Takacs will report on this process during the Science Conference in Europe. Other European countries, such as Finland, Poland and Sweden, have shown interest in this program.
- Dr. Takacs invited Dr. Wessner and Dr. Shivakumar to the Budapest conference to discuss the potential of the program in more details.
- The Hungarian side is very interested in this development. Dr. Vass commented that it would be very helpful if American specialists from the National Academies visit Hungary and share their experiences in this matter.
- The Hungarian side is encouraged to develop communication with Purdue University and set up visits to local incubators to capitalize on their technology transfer ability.

2. Dr. Robert Sienkiewicz, Senior Advisor to Director at the Advanced Technology Program (ATP)⁵, noted the capability of ATO to evaluate and monitor on-going projects. He stated that ATP is open to cooperation with Hungary:

- ATP is willing to host Hungarian visitors to their organization.
- ATP would also welcome the opportunity to send their specialists to Hungary.
- Dr. Vass commented that the Hungarian side would greatly welcome personal contacts with ATP, since they have reviewed the ATP's evaluations and are very impressed with the information provided.

3. Ms. Lenka Fedorkova, Science and Technology Fellow at the National Institute of Health (NIH), reported on the progress of their exchange program:

- Technology Transfer office at NIH recently started an exchange program between professionals in IP management or technology transfer.
 - They worked with Chinese professionals in the past and are currently cooperating with a person from South Africa, and the office is expecting to host a Hungarian specialist, who will spend three to six months at the office observing various operations there.
- Ms. Fedorkova will send the information to Dr. Vass regarding this exchange program.

⁵ ATP has been recognized as the leader in the field of ongoing monitoring and evaluation of emerging technologies.

ACTION 4:
STEPS TO STRENGTHEN KEY AREAS OF PROCESS IMPROVEMENT

1. Ms. Lenka Fedorkova, Science and Technology Fellow at NIH, presented several options for further cooperation development:

- The web site of the Office of Technology and Transfer at NIH has various presentations and sessions available. It is very comprehensive and contains many valuable examples of model documents, discussions of intellectual property rights issues, policies on royalties, licensing procedures, etc. at the NHI These broadcast types of presentations about technology transfers can be used as training tools. The exact link to this information is as follows:
<http://www.ott.nih.gov/items.html>
- NIH can offer their training program to Hungarian specialists. The focus of the program is to share best practices. The visiting side will need to come with their own funds, but they will be able to spend time in the office, engage in technologies and visit with the institute heads about specific questions or needs.
 - Ms. Fedorkova would be willing to elaborate on these issues through an email upon request.
- Ms. Fedorkova will assist in providing the Hungarian side with a handbook used by NIH on technology transfer.

2. Dr. Takacs described a new program involving young scientists organized with the financial support of a Hungarian-American foundation called The National Physical Research and Development foundation. This is a successful project, and the Hungarian side wants to extend in other relationships of this kind. He will provide additional information regarding this project to share with the US network.

3. Ms. Pace Lochte, Director of Virginia Gateway at the University of Virginia, shared her knowledge of the availability of incubator facilities for research purposes for Hungary, which can be rent out for one year by foreign companies. One such facility is located at the Blacksburg research park in Virginia.

4. Dr. Gail Cassell suggested encouraging a partnership between the U.S. National Academy of Sciences and the Hungarian Academy of Sciences to increase joint scientific activities. CSIS will continue to act with Dr. Vass, Dr. Roboz and Dr. Takacs to advance this idea.

ACTION 5:
IMPROVED PRACTICES AND INCENTIVES TO ATTRACT INCREASED PRIVATE CAPITAL
FOR HIGH TECHNOLOGY PROJECTS

1. Mr. Laszlo Horvath, President of the ActiveMedia, introduced three possible areas of improvement and addition to the original survey, which was conducted with the help of the American-Hungarian Executive Circle (AHEC) last spring.

1) There is a tremendous need to translate and explain some basic business management principals to the Hungarian side, which are widely practiced in the United States. These would include business plans, marketing plans, sales plans, etc.

2) American investors do not see Hungary as a financially promising potential partner.

3) According to Mr. Horvath, Hungarian entrepreneurs feel at a loss when it comes to channels and programs the governments of both the United States and Hungary may have to help them introduce their products in the United States.

- Mr. Handy suggested wording the survey questions in a more positive way (“How can we strengthen this capability?”) and targeting the broader population in order to increase the number of contributing organizations.

2. Selection of practical measures that will increase private investment through improved exit strategies, improved management of Hungarian investment funds and stronger role by Hungarian government in facilitating new and added investment.

- Mr. Skrobiszewski commented that there are ways in which joint Hungarian-American ventures can put an emphasis here in the United States for American Ambassadors to feel more comfortable about investing and researching in Hungary.
 - To learn more about these structures, Hungarian side could get in contact with those people or organizations that have already made an investment into Hungarian Innovative Technology.
 - The main issue of concern is funding. The smaller companies will need finances for establishing a base in the United States, where they could come and conduct operations.
- Mr. Hale made an additional comment emphasizing that funding scientific innovation and technology transfer is hard and essential issue to understand, but it can be done in orderly and structural way.
 - For instance, Global Biosecurity Group uses American or European companies as their bases for the business model or entrepreneurial development side in order to secure the exit strategy. Such system allows people do what they know best, be it creating, building or developing funds. In this way money can be recycled into another project, can provide internal investment, additional resources or public globalization.
 - Michael Hale will follow-up and will provide examples of European companies mentioned above.
- Mr. Francis Skrobiszewski, Booz Allen Hamilton representative, recommended the Hungarian specialists to get in touch with Gabor Kalaman and Peter Literati.
- Mr. Skrobiszewski will follow-up with the Hungarian Venture Capital Association and ask about their interest in participation in this US-Hungarian High Technology Cooperation.

ACTION 6:
ESTABLISH ADDED FOCUS ON US-HUNGARY COOPERATION THROUGH EXAMINATION
OF AN EXISTING US-HUNGARY JOIN VENTURE ON A SIGNIFICANT HIGH TECHNOLOGY
PRODUCT

1. Ms. Julianna Lisziewicz, President and CEO of the Genetic Immunity, shared information about their project in developing Derma Vir vaccine for the treatment of HIV/AIDS. Genetic Immunity is a good example of an established and successful venture.

- Genetic Immunity has been researching and developing a new kind of vaccine for already infected HIV patients. It is a privately held Delaware company, and it is a commercial spin off the Washington, D.C. based not- for –profit Research Institute for Genetic and Human Therapy (RIGHT).
- In 2004, Genetic Immunity, LLC started up Genetic Immunity Kft. in Hungary. These companies were created to further develop, manufacture and commercialize the proprietary vaccine composition, delivery and administration technology.
- The companies went through several steps of development in the last ten years:
 - 1) basic research and observation;
 - 2) research and vaccine design;
 - 3) proved the concept that is working;
 - 4) brought the technology to Hungary for clinical try-outs.
- In order to be successful, the developments stated above need funding as well as growth to marketing approval in the United States and Europe.
- Genetic Immunity was able to receive a lot of support from various donations, contracts, grants and from the NHI in the United States.

2. The success of Genetic Immunity is an inspiration to both American and Hungarian cooperative side. Mr. Handy commented that next steps in maturing the project should be:

- 1) To exercise some of the ideas that will make a more high technology ventures become more successful;
- 2) More ideas can be shared with Ms. Lisziewicz and can be integrated into her project.

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