



Stockholms  
universitet



# UniverCITY

KEY INGREDIENTS FOR  
SUCCESSFUL PARTNERSHIPS



MÄLARDALSRÅDET  
COUNCIL FOR THE STOCKHOLM MÄLAR REGION

“COLLABORATION IS  
NOT A GOAL,  
IT IS A PROCESS FOR  
SUCCESS.”

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# KEY INGREDIENTS FOR SUCCESSFUL PARTNERSHIPS

## 1. VISION AND LEADERSHIP

*A clear and communicated vision is important, and that vision must be embraced by committed leaders.*

- Leadership with a sustainable, consistent vision for the long-term continuity of partnerships.
- Leadership from all partners is needed: City – University – Industry

## 2. GOALS, INCENTIVES AND NEEDS

*Even if the different stakeholders share a goal, it is important to be aware that the partners may have different incentives for collaboration and diverse needs based on different values that need to be recognized.*

It is important to find common ground

- ▶ Tips: Create constructive competition for funding based on partnerships.

## 3. STRUCTURED COLLABORATION

*Collaboration between universities and society often takes place via complex networks on complex issues involving many aspects and stakeholders. Create a structure from leadership level down to operational level – this will get stakeholders involved in an institutionalized way.*

- Leadership: Establish official agreements and partnerships.
- Commitment and understanding: Create a context and plan for programs, projects resources, people, time, funding.
- Execution and implementation: Involve city officials, researchers, students, industry experts that execute the projects or programs.



#### 4. OPENESS

“DIVERSITY BEATS MONOCULTURE!”

*Open innovation processes and open, transparent partnerships are key to finding solutions on the complex societal challenges we face.*

- Openness to new ideas, influences and methods of collaboration.
- Openness through inclusiveness in education, research, city planning.
- Openness involving students, citizens, civil servants.
- Open data and sharing of information and knowledge.

#### 5. PRIVATE SECTOR AND SMEs

“DON'T FORGET THE SMEs!”

*The private sector is a crucial partner in solving societal challenges in terms of implementation, funding and scaling solutions. SMEs have greater knowledge of local challenges as they have a local network and are thus important partners to involve in the process.*

- ▶ Tips: Work with clusters or branch organizations.

#### 6. CREATING SPACES, MEETING PLACES

*We need to meet to be able to understand and listen to each other, build trust, partnerships and common goals.*

- Bringing partners and stakeholders together “under one roof” at a central or relevant location, thereby enabling meetings and social interaction, is essential.
- Establishing digital platforms and frameworks to share knowledge, develop new ideas and solutions.
- Creating proximity to save time and resources.

#### 7. THE CITY

The city has a major role in building partnerships to solve societal challenges. The city’s role as an enabler, a testbed and a problem owner that brings people together and provides leadership at a political level.

#### 8. ACCEPT UNCERTAINTY

Accept uncertainty and tolerate the risk of failure, learn from failure, commit to experimentation, give it time!



# WHY UNIVERCITY PARTNERSHIPS?

The UniverCITY Partnerships Conference took place in Stockholm and Uppsala on 12-14 October 2016. The topic was partnerships between universities and cities and regions. The conference gathered together a dedicated group of representatives from academia, politics, business and the innovation ecosystems of cities and regions from Barcelona, Fukuoka, Helsinki, Munich, Seattle, Stockholm and Uppsala to discuss the challenges and opportunities of partnerships.

- How can partnerships between universities and the public sector help to create knowledge and solve societal challenges?
- How can partnerships stimulate regional economic growth and development?
- What impact do they have?

Partnerships between universities and cities have the potential to be highly valuable to cities and regions as well as universities. However, creating mutually fruitful partnerships is a challenge.

The conference presented strategies, methods and partnerships between cities, regions and universities. It had a participatory format and the focus was on exchanging ideas, knowledge and experiences. This report compiles the cases presented during the conference, and aims to give some insight into the methods and strategies that lead to fruitful partnerships, as well as the challenges various partnerships have encountered.

The UniverCITY Partnerships Conference was co-created by the members of the International Regions Benchmarking Consortium (IRBC). The IRBC is a network of sophisticated city-centric metropolitan regions that find it mutually beneficial to compare and learn from each other through data sharing, in-depth research on issues of common interest and face-to-face interaction between member region representatives. Members understand that today's global competition is neither focused on countries nor on individual cities, but on large metropolitan regions that function as individual economic units. Understanding how one's region is performing compared to others of a similar composition and building networks between each other is vital for success on a global economic scale.





## UNIVERCITY PARTNERSHIPS - A NATIONAL POLICY PERSPECTIVE

Opening speech by Ms Helene Hellmark Knutsson, minister for higher education and research in The Swedish government:

” The topic of this conference is important – the collaboration between academia and society.

Challenges like climate change, health, digitization and urban development are crucial for the future of our society. The magnitude of our societal challenges is such that no individual researcher, research discipline, nation, city or industry can develop solutions alone. There is a great need to continue developing research and innovation systems, cooperating across borders and bringing together resources to form a robust ecosystem for research, innovation and entrepreneurship.

There is also a need for global cooperation. We need knowledge and talent from every part of the globe if we are to find the answers to these new questions.

Universities have a strategic responsibility to cooperate with industry and the public sector. Students are a vital source of new ideas. It is students who are taking new knowledge to companies and they make the best innovators.

Policymaking based on research has traditionally been an important part of the “Swedish Model”. In the coming innovation bill, the government is planning to recognize and reward universities for their collaboration with their surrounding society. The government aims to stimulate research-based innovation and to increase collaboration between universities, industry and society, focusing on steps needed to find and implement solutions to global challenges.



# BUILDING BRIDGES BETWEEN ACADEMIA AND THE PUBLIC

How do we bring about effective knowledge transfer between academic institutions and the public and private sector?

**CASE: THE BARCELONA PARC DE SALUT MAR: INTEGRATING RESEARCH, HEALTH SERVICES AND EDUCATION IN AN URBAN HEALTH CLUSTER.**

## BACKGROUND

Barcelona Medical Research Park (PRBB) was founded in 2006 and is situated by the beach, next to Hospital del Mar and Mar University Campus. Hospital del Mar is a general and university hospital with 500 beds. Mar University Campus offers courses in human biology and medicine, houses the hospital's nursing school and trains professional health workers.

PRBB is 55,000 m<sup>2</sup> and contains seven research centers with 1,500 researchers, technicians and administrators from over 50 different countries. It has the highest density of European Research Council grants in the world. The clinical research is carried out in collaboration with Hospital del Mar.

"We have reached a critical mass. You shouldn't be too big or too small to get things done," says [Mr Reimund Fickert, Projects and Communication Director of Barcelona Biomedical Research Park.](#)

## PARTNERSHIP

50% of PRBB's funding comes from the Catalan government, 30% from the city of Barcelona and 20% from Pompeu Fabra University. The PRBB has worked hard to create an interdisciplinary community. One aspect of this is the social activities. The research park has 55 beach volleyball teams and its own choir and orchestra.

"It is not enough for our researchers to only meet once or even three times. They have to meet 20, 30 or 50 times. That is why we do lots of social activities. Once people connect on a personal level they will start talking on a professional level", Mr Fickert adds.

The knowledge transfer at PRBB can be divided into three categories: translational medicine, collaboration with companies and creation of start-ups.

## SUCCESSSES:

The physical proximity between the hospital, research and educational buildings.

The spaces for people to meet.

The cutting-edge infrastructure.

The inter-institutional coalition independent of industry.

## CHALLENGES:

Related sciences like mathematics, physics and engineering in close vicinity.

A better functioning local ecosystem for tech start-ups.

Any kind of support from the Spanish government.

Even more shared spaces for meetings.

Acceptable living expenses in Barcelona.

## CASE: KYUSHU UNIVERSITY'S CENTER OF INNOVATION, FUKUOKA

### BACKGROUND

Kyushu University's Center of Innovation program (COI) is a government-funded initiative aiming to tackle society's challenges. The aim of the COI program is to promote "social needs-oriented R&D" by first mapping out ideal future societies, or visions, then considering service and business models, which are essential for society, and then designing the necessary technology and products.

To put this into practice, an Urban Operating System is being developed and this OS will enable the development of new infrastructure systems in the city.

"Before the development and implementation of an urban operating system, we have to consider whether existing social systems will be able to accept these new technologies and concepts smoothly and co-exist with them in a healthy way," says Mr Hisato Matsuo, Research Fellow, Kyushu University, Center for Co-evolutional Social Systems, Fukuoka, Japan.

The aim of the Urban Operating System known as Co-evolutional Social Systems (CESS) is to ensure the co-evolution of society and technology. Social data, sensor data, traffic data and energy data from society are used to devise new products and services for society, such as mobility, energy management and civic services, wearable devices, smartphone navigation.

### PARTNERSHIP

CESS is a collaboration between academia and local governments and businesses. More than 30 private companies joined the project, while 3 universities are working together on R&D and the local governments of Fukuoka City and Yokohama City are cooperating with CESS in terms of the demonstration, experimentation and social implementation in the cities.



The key success factor of COI is "Under one roof". An innovation platform has been established to bring together universities and companies to work on R&D under one roof.

Many new projects are being promoted in Fukuoka city to promote a smart city. Understanding and considering the existing values and social capital contained within the history, cuisine, "Matsuri" festivals and cultural lifestyle of the city is important.

"It is important during the projects and initiatives for a smarter city to utilize and harmonize this social capital with the technologies we are developing for the smart city of the future", adds Mr Hisato Matsuo.

## CASE: THE NORTHWEST ADVANCED RENEWABLES ALLIANCE - GREEN SKIES, SEATTLE

### BACKGROUND

Washington State University, WSU, consists of five campuses, four research stations and 39 extension centers. WSU is the state's land-grant research

university. Its educational and research mission is to have an impact on the local economy. Thus, the university has a highly practical partnership with Washington State's various industries. This is an important part of how Green Skies came into being.

#### PARTNERSHIP

The history of strong regional relationships between the aviation, airline and timber industries and research universities resulted in WSU being selected as the leading institution for the Northwest Advanced Renewables Alliance (NARA). The WSU-led consortium includes over 20 partners in an alliance of public universities, government laboratories and private industry. WSU and the Northwest Advanced Renewables Alliance, NARA, together run the project "Green Skies".

In 2010 the Obama administration announced there would be grants of \$120 million for research into renewable fuels. The city of Seattle, Boeing, Alaska Airlines, WSU and University of Washington created a partnership to compete for the grants. The rise of CO2 emissions and the Obama administration's priority for the environment formed the basis of the partnership.

\$80 million of the grant went to the state of Washington, and WSU is involved in projects worth \$60 million. The aim is to bring private and public sector partners together with research universities such as WSU to reduce fossil fuel use and greenhouse gas emissions while also bolstering sustainable economic development.

"In November 2016 a cross-country flight will be made running exclusively on woody biomass, which is significant. We hope it will have an impact on CO2 emissions and also foster innovation within aviation and have an effect on the economy," says Ms Colleen Kerr, Vice President for External Affairs and Government Relations, Washington State University, Pullman/Seattle, United States.

## CASE: UNTERNEHMERTUM – THE CITY OF THE FUTURE, MUNICH

#### BACKGROUND

UnternehmerTUM is a public-private company and affiliated institute of the Technical University of Munich (TUM). It is a center for business and innovation and the aim is to initiate and accelerate more sellable tech start-ups. It is a platform shared by academia and the public.

Firstly, UTUM actively identifies technologies from the university and research labs, and then initiates new ventures by systematically matching talents, technology, money and customers. The aim is to create high-tech start-ups specializing in information and communication, healthcare and cleantech and to have a large impact on societal change and growth. UnternehmerTUM is a support system for new businesses.

#### PARTNERSHIP

"Building bridges between important stakeholders is one of our core competences," says Ms Gunda Opitz, Head of Entrepreneurial Network, UnternehmerTUM, Munich.

Next year UnternehmerTUM will begin construction on a new innovation and start-up center focused on smart city solutions. The building will house 10,000 m<sup>2</sup> of office floor in the heart of the city, which is important in terms of involving future customers and the public early on. This is also a public-private partnership project. The aim is to build a home and a platform for new collaboration and cooperation between inventors, innovators, companies and the public.

Munich city has signed up to collaborate with the center. This will make it possible to test and jointly create innovations in a city environment. A key to successful cooperation is to connect start-ups and established companies. The aim is to physically connect this network in the new entrepreneurship center.

# INNOVATION ECOSYSTEMS

What role do cities play in creating an innovative urban environment to support entrepreneurship and start-ups?

## CASE: STOCKHOLM: THE UNICORN FACTORY

### BACKGROUND

A unicorn company is a start-up that rapidly reaches a valuation of \$1 billion or more. After Silicon Valley, Stockholm produces the most unicorns per capita in the world. The city of Stockholm plays various roles in creating an innovative environment to support start-ups. Some of these are:

### PARTNERSHIP

1. ENABLER. Making technology accessible to everyone. Stockholm treats tech infrastructure as ordinary infrastructure. 95% of people in Stockholm have access to fibre broadband.
2. VISIONARY. Creating broad visions that encourage innovations. One such vision for Stockholm is

to become the first cashless society. This will only be achievable with the help of technology.

3. INVESTOR. Stockholm grants SEK 1 million every year to very early-stage innovations by way of innovation scholarships. The city is also part of a foundation that invests in start-ups.

4. CUSTOMER. The city can even buy under-developed innovations.

5. PARTNER. Make sure that more things are added to the "start-up map", so that new innovators and companies can follow the "start-up road map". To work for the community and with the community.

"The main message is: if you want to create an innovative city – support the innovators!" says Mr Joseph Michael, Project Manager Tech & Start-ups, Stockholm Invest"



## CASE: MUNICH CHAMBER OF INDUSTRY AND COMMERCE, TECHNOLOGY TRANSFER AND START-UP ECO SYSTEMS

### BACKGROUND

The Chamber of Commerce for Munich and Upper Bavaria is the largest in Germany, with over 380,000 member companies within industry, trade and services – most of them small and medium-sized. Munich and Upper Bavaria are leading locations for high-tech enterprise in Germany. The chamber of commerce has developed several services to support innovative companies.

Munich has 15 universities that are especially strong in technology and life sciences. In Munich, businesses are well balanced between branches, which is very good for the city. The city has several start-up competitions. 8% of start-up companies in Germany are located in Munich. The city has several active networks and clusters connecting science and companies.

### INGREDIENTS IN MUNICH FOR A CITY WITH A SPIRIT OF INNOVATION:

Infrastructure, both physical and digital.

Companies from many branches with research centers. Finance is also needed.

Top-quality science that is present in all fields of studies.

Strong start-up culture, with a supporting ecosystem and start-up business parks.

Politics, funding programs and public venture capital.

Networks, both between companies and between companies and science.

Leading personalities, politicians, corporate managers and mentors.

International orientation, trade fairs, media and international events.

### PARTNERSHIP

“A creative and innovative ecosystem can only be established if there is healthy competition between the players and other open-minded people, otherwise you do not get an innovative spirit,” says [Ms Ute Berger, Head of Industry and Innovation, Chamber of Industry and Commerce for Munich and upper Bavaria, Munich.](#)

For innovation to happen, location is key – you need a good infrastructure, affordable housing and good jobs for a good quality of life. Furthermore, diversity beats monoculture, which means excellent scientific institutions and globally active companies represent the whole value chain.

“And we cannot stay in our comfort zone relying on what has been successful in the past. We must face future challenges and we need to be slightly hungry and curious. We need to discuss different opinions to be creative,” notes Ms Berger.

## CASE: HELSINKI THINK COMPANY

### BACKGROUND

The Think Company is the University of Helsinki’s entrepreneurial society. It consists of three co-working spaces and a strong, active community. It offers co-working spaces, events and projects to anyone with an enterprising spirit. The activities are interdisciplinary in nature and open to all, the aim being to apply academic insight to practical problem-solving and to offer support and services for entrepreneurial take-offs.

### PARTNERSHIP

Helsinki Think Company is a cooperation between the University of Helsinki and the City of Helsinki. The partners understood that it is the students who put the soul into the initiatives. Professors

can give input and feedback and the city might have resources, but the students have the credibility. The students and academia are both important factors in meeting the societal challenges of the future, and Helsinki Think Company is a means of preparing students for the future labour market.

“Helsinki has always had a strong student culture. This is a way to give them a platform to create something new,” explains [Mr Jarkko Nissinen, Board Member and Host, Helsinki Think Company.](#)

#### CASE: INNOVATION STUDIO FUKUOKA

##### BACKGROUND

Fukuoka Directive Council is a joint collaboration between the industrial, academic, public and private sectors. It was established after the IRBC conference held in Fukuoka in 2010 and is based on ideas and expertise from that conference. The goal of Fukuoka D.C. is to strengthen the global competitiveness of the Fukuoka metropolitan area.

The council has formed five working groups to stimulate business in different areas: Food, tourism, smart city, urban regeneration and human resources.

##### PARTNERSHIP

The council started Innovation Studio Fukuoka as an initiative of the human resources working group to create a framework for generating and supporting new business ideas and start-ups.

“In this project it is the community and the citizens who have ownership. We provide the place and opportunity for citizens to bring their ideas and try them out,” says Mr Tetsuhiro Toyoshima, Director, Fukuoka Directive Council, Fukuoka, Japan.

The project started in 2014. Some prerequisites to make it work include ensuring diversity in research and skills from different fields, as well as prototyping and validation of ideas and projects, and lastly a global outlook.

#### DO START-UPS REALLY CREATE JOBS?

For every job created in the tech scene, 4.3 jobs are created outside the tech scene, according to a report from the University of Brussels. Start-ups spur the economy around them.” Mr Joseph Michael, Stockholm Invest.

A tech start-up normally provides jobs to ten employees within the first three years, and that is a lot.” Ms Ute Berger, Chamber of Industry and Commerce for Munich and upper Bavaria.

In Fukuoka we focus on the younger generation’s collaboration with others. The aim is to create work for the whole community.” Mr Tetsuhiro Toyoshima.



# INNOVATION DISTRICTS

What are innovation districts?

How are successful innovation districts developed?

## CASE: HAGASTADEN AND THE NEW KAROLINSKA HOSPITAL, STOCKHOLM

### BACKGROUND

Stockholm is one of the fastest growing cities in Europe and Hagastaden is one of the largest urban development projects in Sweden. Hagastaden brings together world-class research, clinical development and innovative companies as well as students, researchers and entrepreneurs from around the world. Science, industry and healthcare are united under the brand name Stockholm Life.

The New Karolinska Hospital is a state-of-the-art hospital currently under construction in the heart of the Hagastaden district.

In Hagastaden the focus is on life sciences from a broader pre- and post-healthcare perspective. More than 50% of Sweden's life science activities take place in the Stockholm–Uppsala region. This is comparable to Boston in terms of density.

### PARTNERSHIP

Stockholm Science City is a collaboration between four universities, two municipalities and the county council. The purpose is to build an ecosystem for life sciences where innovation, education, research, industry and the healthcare sector are combined. Stockholm Science City's focus is on developing the Hagastaden district into one of the world's premier areas for life sciences.

"The stakeholders in this district have different cultures and different driving forces. It is important to offer a neutral platform for connecting people and networking, for initiating projects. Knowledge sharing is key," says Ms Ylva Williams, CEO, Stockholm Science City.

The number of life science companies in Hagastaden has grown from 57 in 2009 to 75 today. Each stakeholder is responsible for making efforts to ensure things happen. Larger companies that win procurements for healthcare providers now have to set up "greenhouses" for smaller companies and must collaborate with these companies and with researchers in order to develop the next generation of healthcare services and products.

Proximity between the stakeholders is important. A skyway has been built between Karolinska University Hospital and Karolinska Institutet to facilitate research, with clinical researchers able to move from the patient's bed to the lab bench and back.





# OPEN INNOVATION

What role does academia play in educating creative minds to find solutions to global challenges? How do we engage citizens, private and public stakeholders and academia in the innovation process?

CASE: AIMDAY - A SUCCESSFUL CONCEPT FOR COMMON DEVELOPMENT AND INNOVATION, UPPSALA

## BACKGROUND

The AIMday concept has been developed by Uppsala University Innovation. AIMday gives organizations access to academic specialists who can contribute in solving their specific issues. Academic scientists gain valuable insights into what kind of issues companies are struggling with and how these issues relate to their own research.

## METHOD

The idea behind the AIMday concept is to let industry challenge the university by posing questions. One question is discussed together with a group of experts over the course of one hour. There are two to three people from the company and five to six researchers in the room together with a facilitator.

AIMday started in 2008 and is now used in many areas, such as cancer, energy, aging or materials. The concept is rated highly by participants. Examples of the talks' results are that 26% were on the way to finding a solution and 40% led to a collaboration. AIMday has now spread to Edinburgh, Oxford and Belo Horizonte in Brazil.

"The purpose is to exchange ideas and knowledge while also creating contacts and connections. For those who want to continue collaborating, there is an opportunity to apply for funding." Says Ms Pirkko Tamsen, Head of Uppsala University Innovation.



## CASE: OPENLAB STOCKHOLM

### BACKGROUND

Openlab was founded by 4 universities, the City of Stockholm, the Stockholm county council and the Stockholm county administrative board. The aim is to create conditions for tackling societal challenges to improve the quality of life for citizens in Stockholm – for example to help the elderly live in their homes longer, reduce food waste in schools and hospitals, or reduce traffic density in the city.



### CORE ELEMENTS FOR OPENLAB:

Interdisciplinary teams

Thinking about design and iterative process

Creative and visual study/workspace

### CHALLENGES FOR OPENLAB:

How to make it work for various needs and different stakeholders while simultaneously ensuring an interdisciplinary approach?

How to make it work for open innovation?

How to connect open digital innovation platforms with a physical problem-based learning environment?

### METHOD

The method is to see the city as an innovator – including the universities, the public sector, civil society, companies, start-ups and citizens.

“Citizens are crucial. We aim to create an open innovation process that is needs-driven,” says Mr Ivar Björkman, CEO, Openlab.

The challenges are complex and automatization creates new perspectives, as do digitization and globalization. On a practical level, Openlab uses a variety of ways to create the open innovation process, for instance Masters level courses, professional education/workshops, key partners, hackathons, a digital open innovation platform and more. The digital platform is something Openlab wants to pass on to other cities in Sweden and abroad, as it is a good way of sharing ideas and solutions.

“The important part is not who implements the solutions, but that they are implemented.” adds Mr Ivar Björkman.

In three years there have been 30–40 challenges, of which 10 have been implemented.

## CASE: THE URBAN ACADEMY, HELSINKI

### BACKGROUND

Urban Academy is a strategic collaborative platform and network connecting the city of Helsinki, University of Helsinki and Aalto University. It was established in 2015 to improve the old collaborative models between the universities and the city, as these were not interactive enough.

“The challenge and question facing this partnership is how to expand the model to incorporate the business world. What is the best way to cooperate with the business sector?” asks Ms Annina Ala-Outinen, Coordinator, Urban Academy

### METHOD

The aim is to learn from each other, with students and researchers learning more about how the city works and city officials learning how to implement research. Combining the interests of academia and the city - by supporting and creating interdisciplinary research projects and education. The Urban Academy offers a Bachelor-level program and will launch a new Masters-level program in urban studies and planning in 2017. The idea is to involve the students in the city’s development.

The aim is also to achieve a higher quality of research and make the city and universities more competitive.



## CASE: INNOVATIVE SPIRIT MEETS 5 EURO START-UP, MUNICH

### BACKGROUND

The Innovative Spirit project is based on the fact that not every student wants to run a start-up, so instead the aim is to encourage entrepreneurship and social innovation. This project has been implemented at the University of Munich to improve innovative thinking and stimulate an entrepreneurial and innovative mind-set among students.

### METHOD

“The aim is to teach students methods in the areas of idea generation, creativity training, project management and self-management,” explains Mr Michael Kriegel, Start-Up Consultant/ Social Innovation, University of Munich.

The 5 Euro Start-Up is a competition where teams receive 5 euros to start a process to develop an idea. The goal is to set up a business. The competition is faculty-wide and runs for 12 weeks. It is about generating ideas, building teams, receiving crash courses in project management, finance and marketing and starting a unique project. The next round will be in cooperation with the large crowdfunding platform Startnext.

# BUILDING UNIVERSITY – CITIES

What impact do campus areas have on an urban city environment? How can the location and integration of campus areas be thought out more effectively when developing the city?

## CASE: METROPOLIA UAS'S CAMPUS IN MYLLYPURO, HELSINKI

### BACKGROUND

Live Baltic Campus is an initiative to develop campuses around the Baltic Sea. Myllypuro is situated 10 km from Helsinki city center. The neighbourhood has suffered from a poor reputation and a more socio-economically disadvantaged population. The city therefore made a deliberate choice to choose this part of the city as a higher education location.

The future campus will be focused on construction and civil engineering as well as health and wellbeing, and it will be completed in 2019. The campus will have 6,000 students.

### CAMPUS IMPACT

The aim is to create a campus that is part of the community, a cycle of constant learning and development using the city as a learning platform, and for the campus to strengthen Myllypuro. The campus will promote an open approach and collaboration with companies and citizens of the surrounding area.

“One factor with great potential is the students who will live there,” says Ms Päivi Keränen, Project Manager, Live Baltic Campus project, Metropolia University of Applied Sciences, Helsinki.

A condition for the construction of the new campus was the City Council's demand that a study should be carried out into how campuses can contribute to the economy and industry in Helsinki.



### THE CHALLENGES IDENTIFIED FOR MYLLYPURO INCLUDE:

Which functions and measures could help ensure that the education and expertise in the health and welfare industries in the Myllypuro campus interact with businesses that could benefit from campus activities?

How can the city serve as a testbed for the educational and innovation activities at the campus?

How can it advance student entrepreneurship at the campus?

### THREE LEVELS OF NECESSARY ACTIVITIES IDENTIFIED FOR MYLLYPURO:

Grassroots innovation in collaboration with local players.

Close cooperation with businesses.

International, regional & local high-quality consortiums for research & development.



## CASE: CAMPUS IMPACT ON CITY DEVELOPMENT, FUKUOKA

### BACKGROUND

25 years ago, Kyushu University decided to move from central Fukuoka to the west end of the city. The move and project will be completed in 2018. It is not just a relocation of the buildings and the people, it is a relocation of knowledge and creativity. The new campus has been named Ito Campus and covers 275 hectares. It will have 20,000 students and staff. It is a major project for both the university and the city.

“To take one example, the university has to move 4 million books, some very old and some very valuable,” explains [Mr Hiroto Yasuura, CIO, Executive Vice President, Kyushu University.](#)

### CAMPUS IMPACT

The new Ito campus aims to be an experimental arena for new energy. It will house a research center for hydrogen energy and other renewable energy sources, including wind, solar and geothermal. 40% of the water used on campus will be recycled. Another environmentally friendly aspect is the preservation of 100 hectares of forest adjacent to the campus. A new town for 10,000 people will be developed around the campus.

The old campus in the city center will be used as a model for a “smart city”. The aim for the future is for this to represent the actual implementation of the innovations produced at the new campus.

## CASE: THE GREEN INNOVATION PARK, UPPSALA

### BACKGROUND

The Uppsala-based Swedish University of Agricultural Sciences, SLU, together with the city of Uppsala and STUNS (an organization for collaboration between the universities, businesses and public sector in Uppsala) took the strategic decision to focus the development of the campus on green business, agricultural sciences and innovation. This involves climate change, environmental challenges, building green sustainable cities and feeding a growing population.

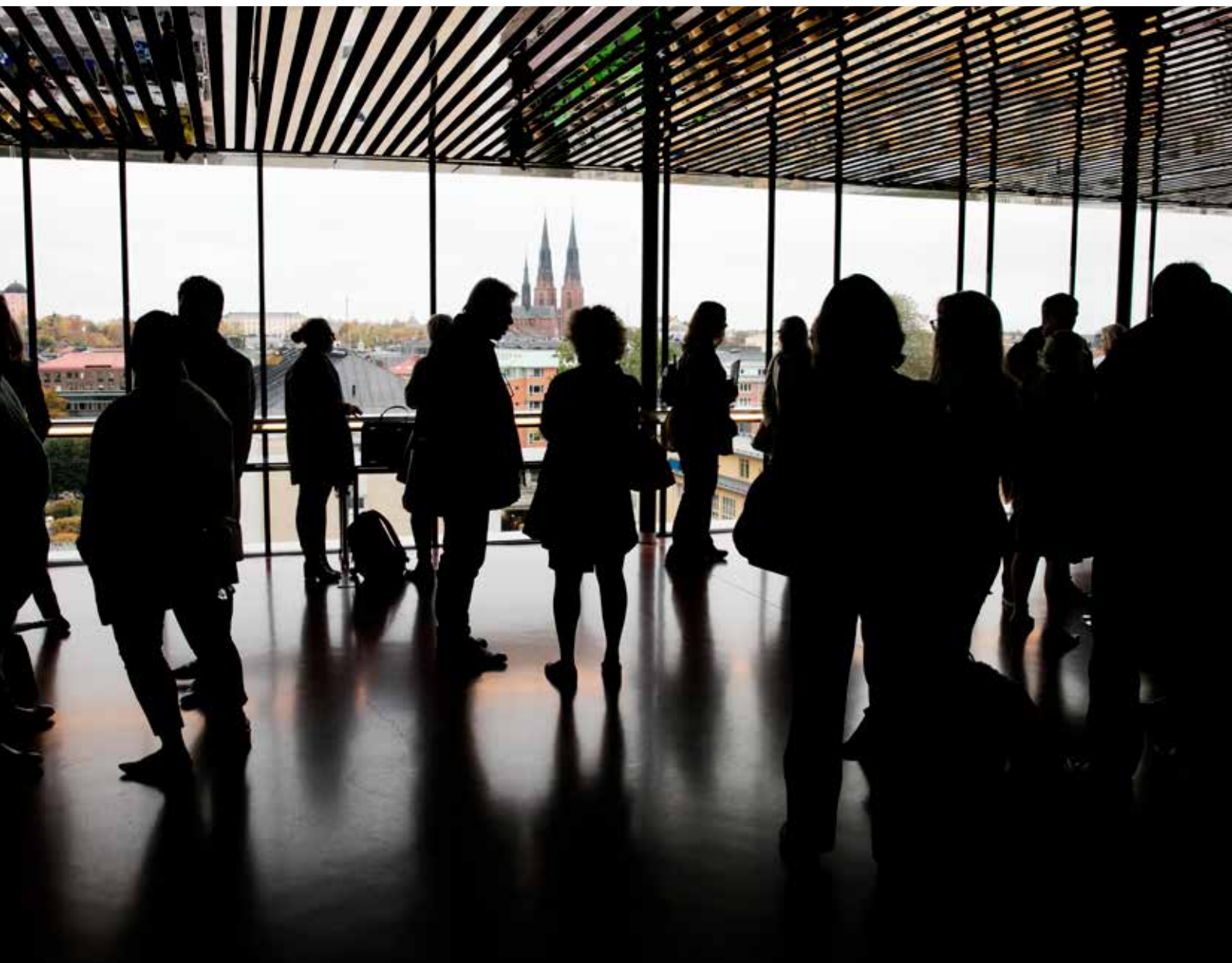
The campus will have an incubator and a business hotel. The business park will cover 250,000 m<sup>2</sup> and house 130 companies. Residential housing will

be developed on the fringes of the campus. The Green Innovation Park will be completed in 2030.

### CAMPUS IMPACT

Uppsala is expanding. The campus is in the south part of Uppsala and the plan is for 50,000 more people to live here by 2050. The campus site will range from the countryside to an integrated part of the city.

“Crucial success factors in the project are: to have an open-minded attitude towards development and change, to pinpoint the most innovative companies and attract them, and finally to foster courage and trust between stakeholders,” says Ms Sara Brännström, Coordinator of Collaboration, Swedish University of Agricultural Sciences (SLU).



## CASE: STOCKHOLM SOUTH CAMPUS – FLEMINGSBERG

### BACKGROUND

Flemingsberg, 20 km southwest of Stockholm city center, used to be a rural area with around 200 inhabitants. In 1972 the Huddinge Hospital (later part of Karolinska University Hospital) opened and continued expanding in the 1960s, 1970s.

In the 1980s Karolinska Institutet moved in and in the 1990s Södertörn University was established in the area. The Royal Institute of Technology campus, a police training academy and the Red Cross University College have moved in since then. The University College of Musical Education has also decided to move to Flemingsberg.

“This means that there are five universities or university colleges and one university hospital within 20 minutes walking distance in Flemingsberg!” notes [Mr Björn Varnestig, CEO, Flemingsberg Science](#).

### CAMPUS IMPACT

Today, Flemingsberg has 18,000 inhabitants, 80,000 students and 18,000 who come here to work. Growth has gone from rapid to explosive with new buildings, new roads, housing and shops. By 2035 the number of inhabitants is expected to reach 50,000.

The integration of Flemingsberg campus with the city is achieved partly through the initiation of networks connecting campus organizations, real estate companies and the municipalities of Huddinge and Stockholm.



### STRENGTHS OF THE FLEMINGSBERG CAMPUS:

A very dense campus

A broad knowledge base

World class life sciences

### WEAKNESSES:

Lack of city features

Few companies

Weak business culture

### OPPORTUNITIES:

Integrate campus and city

Address complex societal challenges

Attract people, organizations and companies

### THREATS:

The academic culture is too strong

Competition with other campuses

Weak incentives for cooperation

# PARTNERSHIPS TO TACKLE SOCIETAL CHALLENGES

What partnerships and tools do we need to meet societal challenges?

CASE: DIGITAL DEMO STOCKHOLM

## BACKGROUND

Stockholm's vision is to become the smartest city in the world by 2040. There are major challenges which must be met and solved by cooperating with the rest of society. Digital Demo is one concrete example of such cooperation in Stockholm.

## METHOD

The city defines its challenges together with the universities, including KTH, Royal Institute of Technology and companies such as Ericsson. The aim is to demonstrate that digital technology can generate attractive solutions to support the needs of society and its citizens.

## DIGITAL DEMO 4 FOCUS AREAS:

Access to clean water: one solution is to monitor the risk of pollution in Lake Mälaren

Safety for elderly people: for example smart locks in care homes

Efficient transport services: such as "green light waves" for public transport

Equal opportunity technology



# DIGITAL DEMO: PRESPECTIVES ON PARTNERSHIPS

*"As a university we need to take on a new role in society. We must be much more in sync with the reality of the future. We need to build long term trusting relationships with partners. The greatest power we have is our students. The students of today are looking to contribute to important changes and developments,"* notes Ms Margareta Norell Bergendahl, Vice President, KTH Royal Institute of Technology.

*"Political leadership from the top is key. The city has more than 40,000 employees. The small steps we take now will be big in the future. We hope to find solutions and work out how to scale them to the rest of Sweden and the rest of the world,"* says Mr Gunnar Björkman, Director of Innovation, City of Stockholm.

*"Digital Demo is a success story in terms of cooperation and understanding other sectors in order to encourage collaboration on innovation. We have to see the long-term broader opportunities while also pinpointing short-term concrete business cases. Digital transformation is fundamental for industry and society in all countries. Cross-sector approaches and new innovation models are fundamental for progress. Smart cities may be the most important sector affected by digital transformation,"* explains Mr Mats Nilsson, Director, Ericsson



## CASE: BUILDING OPEN DATA PLATFORMS, FUKUOKA

### BACKGROUND

Two years ago Kyushu University launched BODIK – the Big Data & Open Data Initiative in Kyushu. It was formed by the Fukuoka Region and the Institute of Systems, Information Technologies and Nanotechnologies, ISIT. BODIK’s vision: no city without open data in the region. Mission: cooperation across all of Japan.

“Collaboration is not a goal, it is a process for success”, says Kazuaki Murakami, Professor Emeritus, Kyushu University, Vice President ISIT.



### METHOD

How can the collaborative and shared economy help tackle societal challenges?

#### THREE STEPS TO TACKLE THE CHALLENGES:

1. The sharing economy is one of the collaborative economies. The sharing economy can be seen as a stack of technologies. The five layers from bottom to top:

Data

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Trust (social media and ratings)

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Developer (APIs, formats)

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Device and application (smart phones)

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Shareable resources (cars, houses)

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2. Open data means data available for everyone without any copyright or other means of control. It can include:

Data from government

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Data from science

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Data from business

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Data from IoT (Internet of Things)

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3. Ecosystems for big data or open data, where all stakeholders can both consume and produce data. Open data for open innovation and open science can be a “nutrient” in the ecosystem.

## CASE: STORMWATER DETOX, SEATTLE

### BACKGROUND

Stormwater runoff is now the number one source of pollution affecting Puget Sound and is also the leading source of pollution in many major water bodies across the nation. Stormwater is rainfall or snowmelt after it has run off managed yards or hard surfaces such as roads, parking lots and rooftops.

In 2010 the Washington Stormwater Center (WSC) was created by Washington State to protect waters through science-based enhancement of stormwater management.

### METHOD

The WSC, co-managed by WSU and the University of Washington, serves as a central resource for research and education, providing the tools, technologies, and expertise to assist those entities responsible for stormwater management, including municipalities.

“The drive for getting this problem solved comes from the community,” notes Christopher Keane, Vice President for Research, Washington State University.

### CHALLENGES AND OPPORTUNITIES FACING THE WSC:

ongoing funding

advancing the development and implementation of cost-effective, low impact technologies and methodologies to address stormwater pollution more quickly

educating citizens more efficiently

and producing effective applications for techniques

Results and techniques such as rain gardens are able to filter stormwater runoff. Rain Wise is a program that aims to build 12,000 rain gardens in the Seattle region. This kind of effort requires a really strong partnership at all levels: local, state and federal.

## CASE: GREEN IOT UPPSALA

### BACKGROUND

The Green IoT project is to build an integrated solution based on IoT for air pollution monitoring and traffic planning in the city of Uppsala.

“A Green IoT testbed will be developed in Uppsala to provide open data for the city government, companies and public to develop smart city applications,” explains [Ms Edith Ngai, Associate Professor, Department of Information Technology, Uppsala University.](#)

### METHOD

Uppsala University owns the project; the city owns the problem. The project consortium consists of Uppsala University, The Royal Institute of Technology, KTH, SICS, Uppsala Municipality, Ericsson, IBM, SenseAir, Upwis and 4Dialog. The goal is to get data into the cloud, where you can store and analyse it and use it for applications for private users, city professionals and even companies.

“We can build the city in a more efficient way. This project is a great way to learn for future planning, to use IoT in new fields - for example using sensors to measure water quality and noise levels,” says Mr Johan Rosén, Strategic Advisor – Enterprise, City of Uppsala.

The project has support from the city’s political leaders and is seen as part of a greater context towards becoming a smarter city.





## CASE: GLOBAL INNOVATION EXCHANGE, SEATTLE

### BACKGROUND

GIX is a global partnership between major research universities and innovative corporations. It aims to develop thought leaders in innovation to solve the world's greatest challenges. These leaders will be adept at solving challenges and will chaperone innovation.

"There is a shared agreement at this conference that the challenges of our time require collaboration across sectors and across borders. The future leaders who will solve these problems must be trained quickly. Our response to this is the Global Innovation Exchange, GIX," outlines [Ms Lara Littlefield, Chief Advancement Officer for Innovation, Global Innovation Exchange, Washington State University.](#)

### METHOD

GIX's programs will entail several phases. First it will offer a degree in IoT as a vehicle for sustainability, health and social innovation. Next will follow degrees in healthcare, clean energy and sustainable cities. The focus will not be on

in-depth research but on outcomes: start-ups, patents and licenses, skunkworks projects, new markets or industries and "aqui-hires" where companies can take on whole teams.

The initial founders of GIX are Washington State University, Tsinghua University of Beijing, China, and Microsoft. Microsoft has been a driving force. Building trust has been an important aspect of this partnership.

"We have met several times. GIX has sent delegations to China eight times in six months. Symbolism has also been fairly significant in this project. It is the first time a Chinese university has had a presence on US soil," Ms Littlefield adds.

*The organizational model of GIX:*

- Founders
- Academic partners (both at founder level and for faculty exchange to be part of teams)
- Consortium, which is a partnership model for industry where companies and NGOs are invited to a reverse pitch model. They pitch to teams of students and faculty members.
- Mentors (entrepreneurs and business leaders)

# ABOUT THE UNIVERCITY PARTNERSHIPS CONFERENCE

"I think the topic for the conference is a good one. It touches upon challenges that all our cities face: how to effectively make knowledge available and translate that into innovation."

"There has been a vibrant exchange here. It has not only been about listening, it has also been about knowledge and contacts. I have a couple of ideas for our city, perhaps even a partnership with another city." Ms Àngels Santigosa, Research Manager – Economic Policy and Local Development Area, Barcelona

"This is my first time in Sweden and it is interesting to learn about Swedish innovation. It is also interesting to hear about incubators and their differences and similarities, since we have our own."

"I am impressed that Swedish networks seem to be tighter than the German ones. We can learn from that. I hope we are ready to negotiate getting the city involved in our new incubator. So far we only have private investors" Ms Christina Weber, Head of Research at the Strascheg Center, Munich University of Applied Sciences, Munich

"It is great to hear from other regions. We are all addressing challenges in a similar way. I feel we have a mutual understanding."

"I will take home with me best practices in terms of how we all do new things to attract business. It is helpful to see different ways of doing things and different partnership models." Ms Chris Mefford, President & CEO, Community Attributes Inc., Seattle

"I have enjoyed learning of examples and initiatives with clear results and about digital challenges and open data, since my work involves assessing how research can benefit the city's decisions. I deal with the cooperation between the city and university every day." Ms Katja Viikama, Research Director, Helsinki City Urban Facts, Helsinki

"I am impressed by the initiatives and activities of all the cities coming together, to find solutions for societal challenges." Mr Tetsuhiro Toyoshima, Director, Fukuoka Directive Council, Fukuoka

THANK YOU! To all speakers and participants of the 7th IRBC conference on UniverCITY Partnerships, thank you very much for three inspiring and engaging days, for sharing your knowledge and work!



“Collaboration is in the DNA of the university and collaboration means engagement. The aim is to bridge the gap between academia and the public sector to achieve more sustainable urban development. This is not an easy task, and it involves looking ahead, beyond borders and limits.” Ms Astrid Söderbergh Widding, Vice-Chancellor of Stockholm University

“Uppsala is an expanding city, and it aims to be sustainable even during this rapid development. The city recognizes the university and the students as an integral part of the city and the engine for its development.” Ms Marlene Burwick, Mayor of Uppsala

“Cities are meeting points for ideas and innovations - a reflection of the global arena. Stockholm aims to be a smart, green and inclusive city. Working together is crucial to achieving success.” Ms Karin Wanngård, Mayor, City of Stockholm

For more information about the International Regions Benchmarking Consortium or the UniverCITY Partnerships Conference please visit:

[www.internationalregions.org](http://www.internationalregions.org)

[www.malardalsradet.se/univercity-partnerships](http://www.malardalsradet.se/univercity-partnerships)



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