Entrepreneurial Eco-System Interview 3

German Medical Valley

Siegfried Balleis Previous mayor of Erlangen and Honorary Professor at FAU

Written by Michael Fischer

"With heart and mind: My vision is to turn Erlangen into Germany's capital for medicine and health." (1996)

— Siegfried Balleis

Siegfried Balleis was the mayor of Erlangen from 1996 to 2014 and was key in establishing the Medical Valley Center (MVC) in Erlangen. He's a politician, representing the Christian Social Union of Bavaria (CSU).

Balleis holds and has held (partly in his function as mayor of Erlangen) numerous offices in clubs, associations, and supervisory bodies. On a supra-local level, for example, he was a member of the presidium and board of the German and Bavarian Association of Cities and Towns. From 2002 to 2014, he served as Chairman of the Board of Directors of KGSt Kommunale Gemeinschaftsstelle für Verwaltungsmanagement – a think tank of the municipalities in Germany and Austria. From 1997 to 2015, he was a member of the CSU party executive committee, and of the party presidium from 2007 to 2011. On October 28, 2011, he was elected Council President of the European Metropolitan Region of Nuremberg and held that position until 2014. In addition, Siegfried Balleis has long been associated with the Friedrich-Alexander University Erlangen-Nürnberg (FAU), as Chairman of the University Association and Honorary Senator, and, since 2018, as an Honorary Professor at the Institute of Political Science. Siegfried Balleis is an honorary citizen of the city of Erlangen and bearer of the Bavarian Order of Merit. n this interview, Siegfried Balleis explains how he, as Mayor of the City of Erlangen, was key in establishing an ecosystem especially for start-ups in the medical sector. MVC is the ideal place for anyone looking to start a business in the medical field. Besides giving people a space, the MVC also provides valuable start-up services, consulting in financing and funding, networks, marketing services, and international services.

Dr. Balleis, tell us a little about yourself?

Let me tell you a short story about myself. I grew up in a suburb of Nuremberg in the 1950s. My father, who was captured in the Soviet Union at the end of the Second World War, was very familiar with the term "Carpe Diem" – the instant of our existence. Every moment in your life is crucial. When I was young, he told me "Boy if you don't take risks, you're not doing anything." As a young boy, this sounded pretty harsh, but it made me a man who's never afraid to make decisions – and a man with an ambitious vision.

How did you identify the need for a medical innovation hub?

Germany has experienced a reasonably stable economy for decades. But it has not always been that way. From 1993 to 1996, Germany experienced a very sharp recession that resulted in a steep loss of jobs. This was especially devastating in the city of Erlangen. Nearly ten percent of the seventy thousand workplaces had disappeared. In this difficult period, the city administration of Erlangen discussed strategies on how to tackle these problems. One strategy developed was to start a consistent innovation policy which turned out to be the right path. We also focused on a second approach with the idea of a SWOT-analysis to identify the strengths, weaknesses, opportunities, and threats of the Erlangen economy.

The results of these analyses were amazing. They showed that Erlangen's working population had the highest percentage of people employed in the health sector compared to all other eighty-three cities in Germany. It became obvious that Erlangen had a unique selling point compared to all other German cities and it was a logical step to emphasize this individuality. In my inauguration speech, as recently elected mayor, I outlined my plan for the further development of Erlangen, "it's my vision, and it should be our common vision, to develop Erlangen as a national capital of medical research, production, and services".

What were the initial difficulties and what were the key enablers of this project?

Although there had been many doubts in the city of Erlangen at the beginning about whether this was the right approach, an intense discussion and cooperation process started between the different stakeholders such as local politicians, local businessmen, and the members of the Friedrich-Alexander University Erlangen-Nürnberg. A very important milestone of this development was when the CEO of Siemens, Heinrich von Pierer, announced that at the end of 1997, his company would make its largest investment, €100 million, in the so-called old "Bundesländer" after the German reunification. This decision was highly supported by national and federal policies as, then Germany's minister of finance, Theo Waigel, enabled Siemens to buy a 60,000 m² area from the federal government.

Under the rule of Prime Minister Edmund Stoiber, the development of the Medical Valley is strongly connected with the privatization policy of the Bavarian government. His mission statement was, "the main task of politics is not to possess assets but to shape the future". He developed an innovation strategy for the free state of Bavaria in which all-inall nearly €5 billion were invested in innovation projects. In Germany, this policy is known as the Bavarian "Hightech-offensive". Nearly \$1 billion were invested in the Erlangen region in innovation projects and modernizing the hospital infrastructure.

How did professional networks push the project towards success?

On the regional level the "Competence initiative medicine, pharmaceutics, and health" was founded. The members of this network met face-to-face several times every year, connecting specialists from politics, medical business and services, and official institutions. The key concept was that the participants presented their ideas and business plans within a "five-minute talk" to find the connection between ideas and capital. The result of this network were many new corporations and foundations of new enterprises. Looking back from the year 2020, one can see at least twenty thousand new jobs have been created in this newly found ecosystem.

Parallel to this network on the regional level the "Forum Medtech Pharma" has been founded on the Bavarian level, organizing corporations and contacts and informing on the latest trends in the health sector by offering workshops, sessions, and fairs.

What made this project unique?

With the Bavarian Government's strong commitment, the new Medical Valley Center was designed and built up. It was opened in May 2003 and after six months, it became Germany's most successful incubation center. It's not surprising that this innovation center was expanded to 5.000 square meters within two years. The MVC hosts more than thirty-five startup companies and institutions connected with innovation activities, such as the Medical Valley cluster management and the chamber of industry and commerce.

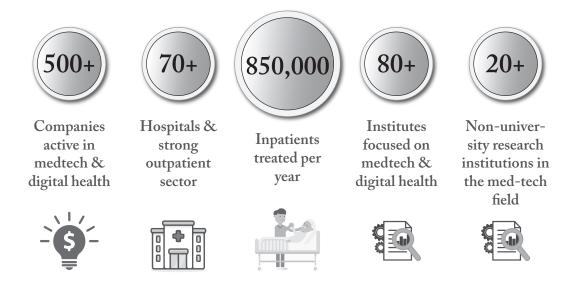
The unique selling point of this Medical Valley Center is it is not only a business incubation center but also a scientific research unit. The central Institute for Medical Technology and the Institute of Biomedical Technology work closely together with the activities of the start-up companies in the MVC. The young entrepreneurs and scientists meet nearly every day in the common cafeteria or common lecture halls of the MVC.

At the beginning of 2007 the society "Medical Valley European Metropolitan Region Nuremberg" was founded, coordinating all stakeholders in politics, business, and the scientific community in the region. This organization continues to be the motor and coordinator of all activities in the Medical Valley.

The Medical Valley experienced its next big step by winning a national excellence competition of the German Ministry of Education and Research (BMBF) Professor Reinhardt designed the draft together with Professor Juergen Schuettler, the dean of the medical faculty, and received €40 million. They matched it with another €50 million from the private sector. Today, the Medical Valley is a national Leading-Edge Cluster upon its application as a 'Centre of Excellence for Medical Engineering'.

What is the cluster's key to success?

The cluster's strength is its power of innovation. Businesses and research institutes in the Medical Valley EMN benefit from the short distances to develop best-in-class research and development processes. These, in turn, result in competitive advantages and growth



opportunities in a global market. Healthcare providers benefit from access to state-ofthe-art technologies and cost optimization. Cluster management encourages these developments and strengthens the market positioning of the brand Medical Valley EMN. Thus, the region is associated with excellence in healthcare provision and is perceived as more and more attractive both in Germany and internationally. As the global market share and sales revenues are increasing, the economic power of the region is strengthened. This approach enables us to create and secure jobs.

What is Medical Valley's vision?

Medical Valley European Metropolitan Region of Nuremberg (EMN) is one of the strongest, most active medical technology research clusters in the world. Renowned partners from industry, research, healthcare, and politics have come together to form this interdisciplinary network. Their common goal is to innovate successful solutions for the healthcare of tomorrow.

Medical engineering products and services are currently being developed in over forty projects. These products and services are aimed at making prevention, diagnosis, treatment, and rehabilitation, in connection with a variety of illnesses, more efficient and effective. Activities in the cluster and communication among the stakeholders are coordinated by the Medical Valley EMN Association, which also supports its members with numerous services.

FAU is a member of Medical Valley and has close connections to many of its partners thanks to its research projects. Furthermore, research and teaching in this field have become a well-established part of the University through the Central Institute of Healthcare Engineering and the medical technology degree program.

The long-term strategy of the Medical Valley EMN is to optimize the structures of healthcare provision. Medical Valley EMN brings together all parties to establish an international model region of optimized healthcare provision.

What is 'Communities of Practice' and how does it help entrepreneurs?

The Communities of Practice (CoP) in Medical Valley EMN are groups of people that communicate on a regular basis and learn from each other in their particular field. In cooperation with the board of the cluster, the CoP topics are discussed regularly and, if necessary, new communities are established. Thus, the CoPs play an important role to cover the topics that are relevant for the implementation of the cluster strategy and to use them to enable real projects.

The Digital Hub Initiative, developed by the Federal Ministry for Economic Affairs and Energy, seeks to support the establishment of digital hubs in Germany. The underlying idea of establishing hubs is that cooperation between companies and business start-ups within a confined area, like in Silicon Valley, will boost innovation, especially in the digital age.

Cooperation and networking in a common space is the breeding ground for new innovative products and business models. In this way, a regional "hub ecosystem" can be created where new ideas emerge, and digital transformation is taken forward. Therefore, hubs with international appeal/reach are necessary, in which German and international business start-ups, scientists, investors and established companies mutually support and strengthen each other.