



## “Altbuergermeister“ (former mayor) of Erlangen and Honorary Professor at FAU, Siegfried Balleis

“With Heart and Mind: My vision is to turn Erlangen into Germany’s Capital for Medicine and Health” – Siegfried Balleis, 1996

Siegfried Balleis was the mayor of Erlangen, Germany, from 1996 to 2014, and was a key figure in establishing the Medical Valley Center (MVC) in Erlangen. This institute assists young entrepreneurs in finding the ideal environment for growth. Besides serving space for these entrepreneurs, MVC also provides valuable start-up services, consulting in financing and funding, networks, marketing services and international services. MVC is the ideal place for anyone considering starting a business in the medical field.

**Due to the COVID-19 situation, the German economy is very tense. Many established industrial sectors are on the brink of collapse. Yet before 2020 - with the exception of the stock market crash in 2009 - Germany has been in a reasonable economic situation for decades. But it has not always been like this. If we look back 30 years, we see the fall of the Berlin Wall and the reunification of Germany. This led to an economic boom, up until 1993. However, following this period, international competition challenged Germany's economy because many structural problems had not been solved during the boom. In the years from 1993 to 1996, Germany experienced a very sharp recession that was accompanied by a steep loss of jobs. This was especially devastating in the city of Erlangen. Nearly ten percent of the seventy thousand workplaces had disappeared. At exactly this time, Siegfried Balleis is freshly placed into Erlangen's mayor's office. Nevertheless, Dr. Balleis is not concerned about the stark structural constraints. He is driven by an audacious vision: He wants to turn Erlangen into a nationally renowned oasis of innovation. This transformation process, which Mr. Balleis has significantly coordinated and influenced during his three terms of office, will be described in detail in this interview by the current Special Coordinator of the "Clean Air" Immediate Action Program. A success story that is unique in this world and preceded the VC boom in Silicon Valley for several years. Furthermore, he reveals the pioneering role the MVC has achieved to this day.**

**Dr. Balleis, how were you dealing with this devastating recession in the mid-nineties? What was your solution?**

Let me tell you short story about myself. I grew up in a suburb of Nuremberg in the 1950s. My Father, who's been captured in the Soviet Union at the end of the Second World War after 1945 for two years, was very familiar with the term "Carpe Diem" – the instant of our existence. Therefore, every moment in your life is crucial. He told me when I was young "Boy, if you don't take risks, you're not doing anything, and therefore you won't ever have anything, and you'll always remain nothing." This sounded pretty harsh to me as a boy, but it made me to a man who's never afraid to make decisions -- and a man with ambitious visons.

In this difficult recession, the city administration of Erlangen – including me as recently elected mayor – discussed strategies for tackling 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 (SWOT = Strengths, Weaknesses, Opportunities and Threats) to identify the strengths and weaknesses of the Erlangen economy and to discover both the opportunities and threats.

The amazing result of this analysis showed that at the time Erlangen's labor force– compared to all other eighty-three cities in Germany with a population of more than 100,000 inhabitants – had the highest percentage of people employed in the health sector. It became obvious that Erlangen had a strong selling point when compared with these other German cities, and it seemed logical to emphasize its unique position.

In my inauguration speech, I outlined my plan for the future development of our city. I stated that it was my vision, and I hoped it would 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 Erlangen at the beginning as to whether this would be the right approach, an intense discussion and cooperation process began between the different stakeholders, such as local politicians, local businessmen, and the members of the Friedrich-Alexander University Erlangen-Nuremberg. An important milestone in this development was reached when Siemens

CEO Heinrich von Pierer announced at the end of 1997 that his company would make its largest investment in the so-called old “Bundesländer” after the German reunification, amounting to of €100 million. This decision was strongly supported by national and federal entities, and Germany’s then-minister of finance, Theo Waigel, enabled Siemens to buy a 60,000 m<sup>2</sup> area from the federal government.

The development of the Medical Valley is strongly connected with the privatization policy of the Bavarian government under the leadership of Prime Minister Edmund Stoiber. In his mission statement he said: “the main task of politics is not to possess assets but to shape the future”. To that end, he developed an innovation strategy for the free state of Bavaria in which nearly €5 billion were invested in innovation projects. This policy is known in Germany as the “Bavarian high-tech offensive”. Nearly €1 billion were invested in the Erlangen region, both in innovation projects and in modernizing the hospital infrastructure.

### **How did professional networks push the project toward success?**

On a regional level, the competence initiative for medicine, pharmaceuticals and health was founded. The members of this network met several times every year, connecting specialists in the fields of politics, medical business and services, and government. The key concept was for participants to present their ideas and business plans within the structure of five-minute talks, in order to find the connection between ideas and capital. The result of this network was the formation of many new corporations and the foundation of several new enterprises. Looking back from the vantage point of 2020, one can see that 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” was founded on the Bavarian level, organizing corporations and contacts and providing information on recent trends in the health sector. This was done through offering workshops, talk-sessions, and fairs.

### **What makes this project unique?**

With this strong commitment on the part of the Bavarian Government, the new Medical Valley Center (MVC), was designed and built and opened in May 2003. Within six months it became Germany’s most successful incubation center. It’s not surprising that this innovation center grew to 5,000 square meters within two years. The MVC hosts more than thirty-five start-up 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 that it’s not only a business incubation center but a scientific research unit as well. The Central Institute for Medical Technology and the Institute of Biomedical Technology work very closely together with the activities of the start-up companies in the MVC. The young entrepreneurs and the scientists meet nearly every day in the cafeteria or in 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 driving force and coordinator of all activities in the Medical Valley.

The Medical Valley took its next big step by winning a national excellence competition instituted by the German Ministry of Education and Research (BMBF). Professor Reinhardt designed the draft, together with the dean of the medical faculty, Professor Juergen Schuettler, and received 40€ million. This was matched by 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 on a global market. Healthcare providers benefit from access to state-of-the-art technologies and cost minimizing. Cluster management encourages these developments and strengthens the market positioning of the brand Medical Valley EMN. Now, 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 increase, the economic power of the region is strengthened. This approach enables us to both secure and create jobs.

## **What is the Medical Valley's vision?**

Medical Valley (EMN) is one of the strongest and 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 options for the healthcare of tomorrow.

Medical engineering products and services are currently being developed through 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 within 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 e.V. brings all parties together 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 who communicate on a regular basis and learn from each other within their particular fields. In cooperation with the board of the cluster, the CoP topics are regularly discussed and, if necessary, new communities are established. The CoPs play an important role in covering the topics that are relevant to the implementation of the cluster strategy and using 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 throughout Germany. The underlying idea of establishing a number of hubs is that cooperation between companies and business start-ups within a confined area (such as in the Silicon Valley) will boost innovation, especially now, in the digital age.

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

500+

companies  
active in med-  
tech & digital  
health



70+

hospitals &  
strong outpa-  
tient sector



850,000

inpatients  
treated per  
year



80+

institutes fo-  
cused on  
medtech &  
digital health



20+

non-universi-  
ty research in-  
stitutions in  
the med-tech  
field

