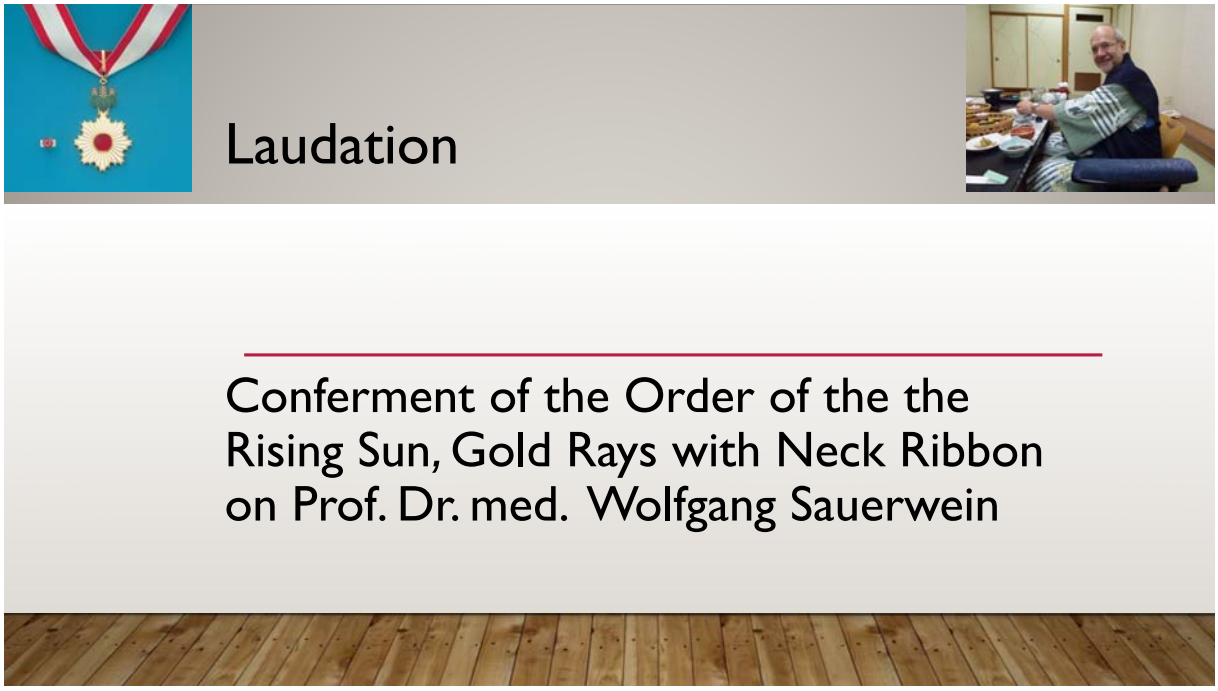
Laudatory Speech

Award of the Order of the Rising Sun, Gold Rays with Neck Ribbon of the Japanese Imperial House, to Professor Dr. med. Wolfgang Sauerwein, in Düsseldorf, Germany, Aug. 27, 2021.

Prof. Dr. rer. nat. Dr. h.c. mult. Evamarie Hey Hawkins



Dear Consul General Kiminori Iwama,

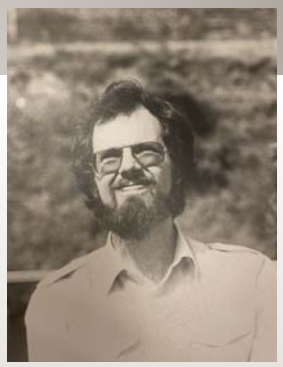
Dear Lord Mayor Thomas Kufen,

dear guests, dear Wolfgang,

it is a great honor and even greater pleasure for me, on the occasion of the award of the Order of the Rising Sun, Gold Rays with Neck Ribbon, to briefly introduce to you the awardee, Professor Dr. med. Wolfgang Sauerwein, and some of his pioneering contributions in radiotherapy, but also in particular his tireless efforts to establish extremely successful collaborations between Germany and Japan in the next few minutes.

Doctoral Thesis and Habilitation

- 1980: PhD thesis on "Contribution to radiotherapy of seminoma“
- 1993: Habilitation on "Neutron capture reactions for the optimization of radiation therapy with fast neutrons"



Wolfgang Sauerwein 1979

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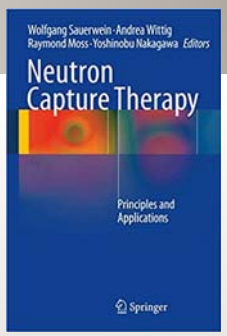
Wolfgang Sauerwein studied medicine at the University of Essen and the University of Limoges in France, graduating in 1980 with a doctoral thesis on "Contribution to Radiotherapy of Seminoma". In 1993, he received his postdoctoral degree in radiation oncology from the University of Essen with a thesis on "Neutron capture reactions for the optimization of radiation therapy with fast neutrons". In 1998 he was appointed professor at the University of Essen.

Scientific achievements

- Groundbreaking work in radiation oncology
- More than 300 scientific publications and 500 published abstracts
- Organizer of a large number of national and international symposia and workshops
- Important handbook : „Neutron Capture Therapy - Principles and Applications“



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Wolfgang Sauerwein says of himself that treating patients has always been his first priority - giving desperate cancer patients new confidence was very important to him.

New treatment methods, especially innovative aspects in radiation therapy, are therefore among the focal points of Wolfgang Sauerwein's groundbreaking, internationally recognized scientific work. He is author and co-author of more than 300 scientific publications as well as organizer of a large number of national and international symposia and workshops. The work on "Neutron Capture Therapy - Principles and Applications" published in 2012 is one of the most important standard works in our community. For those interested, it should be mentioned that Wolfgang Sauerwein is currently working on a new edition, which will be published soon. Thus, our honoree is one of the pioneers in the field of neutron capture therapy, not only in Germany, but worldwide.

Wolfgang Sauerwein has already received several awards for his excellent work. I will only mention the Hatanaka Award of the International Society for Neutron Capture Therapy (ISNCT) in 2006.

Even though Wolfgang Sauerwein spent his entire, extremely successful professional life until his retirement in December 2017 with only one employer, namely Essen University Hospital, he is internationally recognized and highly respected as a specialist in radiation oncology with a research focus on neutron therapy. He resisted attempts to lure him away from Essen. In 2002, for example, he declined an offer of a professorship in radiology at the University of Ottawa (Canada) combined with the position of "Director for Clinical Research" at the Ottawa Regional Cancer Center. Even though the hub of his professional life was in Essen, Wolfgang Sauerwein made his research area and the Essen University Hospital, but also the city of Essen and the Ruhr region as a whole, known worldwide through his many international contacts and collaborations.

Today, of course, the focus will be on his very intensive scientific contacts, but also on many personal friendships in Japan.

Wolfgang Sauerwein has been a major supporter of German-Japanese exchange in science and business over the past 30 years.

How it all started.....

- Juli 1989, International Congress of Radiology in Paris
- Prof. Hiroshi Hatanaka

First treatments with BNCT in Japan in 1968.
Dr. Hiroshi HATANAKA and Prof. Keiji SANO at Tokyo University

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It all started in July 1989, when Wolfgang Sauerwein met Prof. Hiroshi Hatanaka, the pioneer in the field of Boron Neutron Capture Therapy (BNCT), at the International Congress of Radiology in Paris. Since 1968, he had been the first in Japan to successfully treat malignant brain tumors with BNCT, and presented these results at the congress in Paris. Wolfgang Sauerwein was, of course, absolutely thrilled.

… and how it went on ..

- November 1990:
  Wolfgang Sauerwein's first visit to Japan to participate at the Intraoperative Radiation Therapy 3rd International Symposium in Kyoto

First impressions

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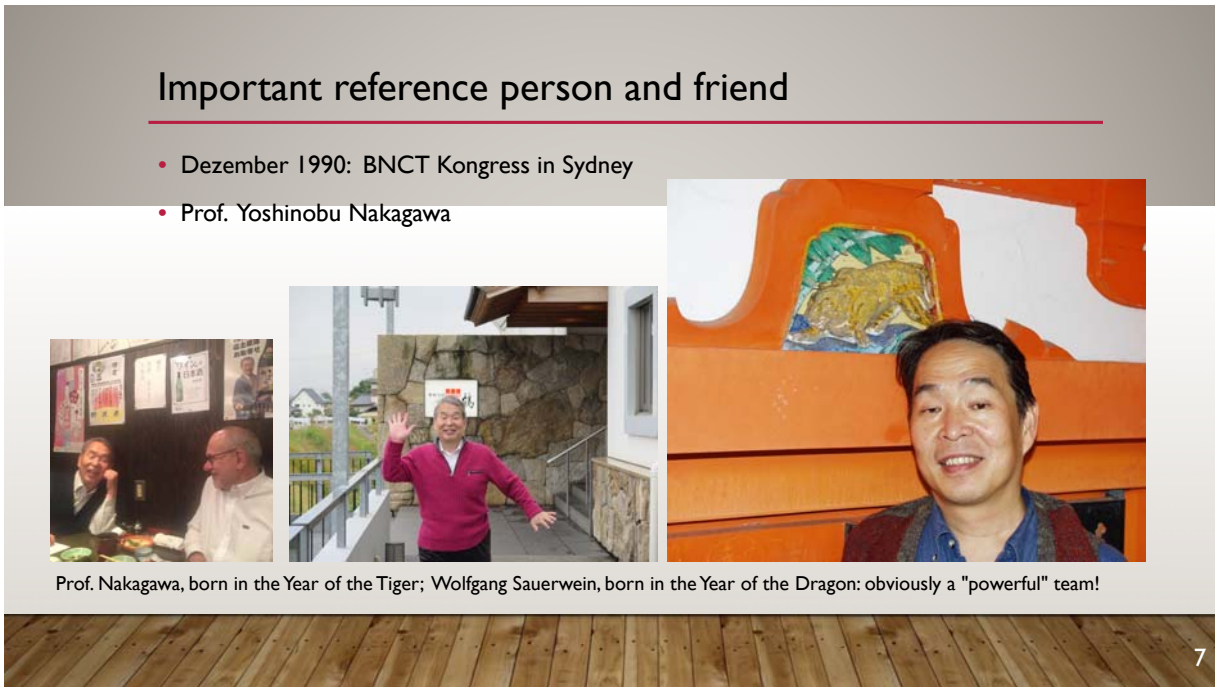
This was followed in November 1990 by Wolfgang Sauerwein's first visit to Japan in the context of a medical congress in Kyoto. As the coronation of Emperor Akihito took place at the same time, areas in the temples and shrines that are normally not accessible were exceptionally open to the public, so that this first visit to Japan left very impressive memories in many respects.



In December 1990, at the BNCT Congress in Sydney, Prof. Hatanaka introduced Prof. Yoshinobu Nakagawa, who later became his successor, to Wolfgang Sauerwein; both are still linked by a deep friendship. In the following years there was a regular exchange with Japanese colleagues at various congresses.

First BNCT patient in Europe

- 1997: Treatment of an Austrian citizen with BNCT as part of a large EU project at the EU research reactor HFR in Petten, (NL)
- Prepared with Prof. Yoshinobu Nakagawa (right) and Prof. Akria Matsumura (2nd from left)

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1997 was an important year, as Wolfgang Sauerwein treated the first patient in Europe, an Austrian, with BNCT as part of a large EU project at the research reactor in Petten in the Netherlands. This procedure had been prepared with a very intensive exchange with Japanese colleagues, especially with Prof. Nakagawa, and Prof. Akria Matsumura from the University of Tsukuba.

Numerous committees - and today: DGBNCT

- Chairman of the BNCT Group of the European Organization for Research and Treatment of Cancer (from 1997 to 2003)
- President of the der International Society for Neutron Capture Therapy (ISNCT, 1998-2000 und 2000-2002)
- Since 2019 President of the German Society for Boron Neutron Capture Therapy (DGBNCT)

DGBNCT
Deutsche Gesellschaft für Bor-Neutroneneinfangtherapie e.V.

https://dgbnct.de/

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This was the start for the BNCT in Europe. In the following years, Wolfgang Sauerwein was very actively involved in the establishment and further development of BNCT in various scientific societies. Since 2019, he has now been president of the German Society for Boron Neutron Capture Therapy, whose establishment he co-initiated and significantly advanced. Important focal points are the intensification of the cooperation with the Japanese BNCT Society.

Apparently, Wolfgang's daughter Kathrin inherited the desire to travel the world and the love of Japan from her father. Following her architecture studies, she spent six years in Tokyo from 2008, first as part of a DAAD scholarship, then as an associate of the well-known Japanese architect Atsushi Kitagawara. This gave Wolfgang the opportunity to travel with his daughter outside the big cities to rural areas and to get to know Japan from a completely different side, as well as to make acquaintances and friendships with people who had nothing to do with medicine or science. I think it was these experiences that greatly shaped Wolfgang Sauerwein's understanding of Japanese culture and way of life.

Building bridges

- 2014: Appointment as Japan Representative of the Medical Faculty of the University of Duisburg-Essen

With Miss Sake at the Expo 2015 in Milan


Ukiyo-e Color woodcuts

Lecture at the Southern Tohoku Hospital

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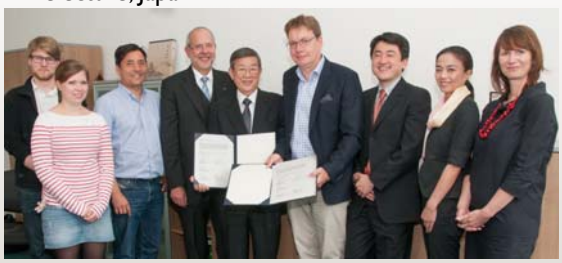
In 2014, Wolfgang Sauerwein was appointed Japan Representative of the Medical Faculty of the University of Duisburg-Essen. In this newly created position, he was able to expand his excellent scientific collaborations and contacts more and more into the fields of politics and industry.

Intense exchange with Japan

- 2014: First visit of a government delegation
- Cooperation between Essen University Hospital and Minami-Tohoku Hospital Koriyama in Fukushima Prefecture, Japan


Signing of the contract in Essen: 4. f.l.t.r.: W. Sauerwein, Prof. Kanichi Seto, Dekan Jan Buer, Ichiro Seto und Kazuyo Igawa


Visit at Koriyama
(note the german flag)

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Accordingly, Wolfgang Sauerwein accompanied several delegations from North Rhine-Westphalia to Japan as a scientist, thus making a valuable and important

contribution to strengthening existing political contacts and intensifying cooperations between medical and government institutions on both the German and Japanese sides.

Intense exchange with Japan

- 2017: Delegation trip of the city of Essen with Lord Mayor Thomas Kufen
- Signing of a MoU between the cities of Essen and Koriyama

Signing Ceremony


Lord Mayor Kufen with W. Sauerwein, at the Fukushima Medical Device Development Support Centre (Koriyama)

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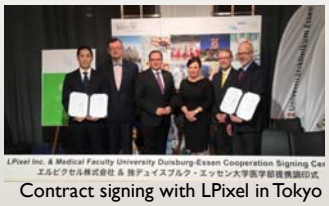
Major achievements of Wolfgang Sauerwein are very successful, contractually agreed cooperations between the Essen University Hospital and Japanese academic partners, whereby, in addition to joint research activities, a student exchange with the University of Hiroshima should also be mentioned. But also the sister-city arrangement between Essen and Koriyama, initiated in 2017, should not go unmentioned.

Cooperation with industries

- Successful cooperation with Japanese companies, supported by NRW Invest :
- 2017 Foundation of QD Laser GmbH in Essen; clinical study for the introduction of a laser-based visual aid on the European market
- 2017 Cooperation with LPixel (Tokyo) on Artificial Intelligence in X-ray Diagno

Minister Svenja Schulze
(contract signing with QDLaser)



Contract signing with LPixel in Tokyo

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The contacts established in this way also enabled various very successful collaborations to be realized with Japanese companies, supported by NRW Invest. For example, QD Laser GmbH (a subsidiary of QD Laser in Kawasaki) was founded in Essen in 2017 to conduct a clinical trial for the introduction of a laser-based vision aid on the European market; this registration trial was successfully completed in Essen. Further cooperation agreements were signed with the companies LPixel and XENOMA (in Tokyo) and Kikuchiseisakusho (in Fukushima),

Cooperation with industries

- 2017/18 Pilot studies with the companies XENOMA (Tokyo) and Kikuchiseisakusho (Fukushima) on smart clothing and an exoskeleton for use in patients with walking disorders (e.g. Parkinson's disease), respectively.
- 2021 Cooperation between the company Hundred Co., Ltd. (Fukushima) and the Central Animal Laboratory of the Medical Faculty of the University of Duisburg-Essen.

Wolfgang Sauerwein mit Exoskelett

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which led, among other things, to pilot studies with smart clothing and an exoskeleton for use by patients with walking disorders (e.g., Parkinson's disease) at the Haus Berge Geriatric Center. Since 2018, Wolfgang Sauerwein has also been a Specially Appointed Professor at the Neutron Therapy Research Center at Okayama University for several months on an annual base.

I could of course say much, much more about Wolfgang Sauerwein, but I think that my brief remarks have given you a lasting impression of the scientist and the person Wolfgang Sauerwein. When Wolfgang Sauerwein talks about his many projects, collaborations and activities in Japan with captivating enthusiasm, it is very obvious why the University of Duisburg-Essen has appointed him as Japan representative in 2014 and why, as a scientific ambassador, he has initiated numerous fruitful collaborations through his scientific expertise but also, in particular, through his intercultural understanding and empathy, on the basis of which many projects are still being developed today.

Today, Consul General Kiminori Iwama has presented Wolfgang Sauerwein with the Order of the Rising Sun, Gold Rays with Neck Ribbon. The Order is awarded for exceptional service in the civilian or military field. Wolfgang Sauerwein is an extremely worthy recipient of the Order, who, as a specialist in radiology and radiation oncology with a research focus on neutron therapy and as an expert in radiation therapy in the field of cancer research, has earned great merits in many years of extremely successful cooperation with Japanese universities and research institutions.

I join the numerous, sincere congratulations of our worldwide BNCT community and congratulate you, dear Wolfgang, once again cordially on this well-deserved prestigious honor. Congratulations!