A rich life

He was born at the old Maternity Clinic. Later on he walked the hospital corridors as a porter and medical student, before he eventually ended up as the Hospital Director. Oslo University Hospital – Rikshospitalet has played a major part in the life of Professor emeritus Jacob B. Natvig. These days, he goes there for his annual coronary check-ups.

«A man who cannot make a mistake, cannot make anything» is a maxime that has accompanied the 80-year-old throughout a long and more than averagely active career.

«I believe we need to be willing to live with a degree of uncertainty,» he says thoughtfully. «Personally, I am not exactly reckless, but there is more than a grain of truth in the saying. We need to risk making mistakes».

Nevertheless, when I ask what mistakes he has made, he finds it difficult to respond. And perhaps the answer would not be appropriate for a portrait interview such as this. Interviewing a man of Dr. Natvig's calibre involves a certain risk of professorial «name dropping» and anecdotes. However, he turns out to have a great deal of interesting historic material lined up for me.

His home at Bekkelagshøgda in Oslo bears witness to his social involvement and his interest in history. I am welcomed into a cosy lounge decorated in warm colours, furnished with rustic antiques and shelves brimming with books, walls decorated with lithographic prints and paintings and floors covered with soft carpets in shades of maroon and orange. The dining table is covered with old publications and books, as well as piles of documents and old photographs that he has picked out for our interview. He fetches two large mugs of coffee from the kitchen, both bearing the *Scandinavian Journal of Immunology* logo.

A pioneer in immunology

The retired professor was a key figure in building up the discipline of immunology in Norway. Since the late 1960s he was a driving force in Norwegian immunological research as head of the Rheumatology Research Department at Oslo University Hospital – Rikshospitalet (later the Department for General and Rheumatological

Immunology). For many years he remained the most frequently cited Norwegian researcher in biomedicine, with a number of his articles published in *Nature* and other key international publications. In 2009 he was made a Knight, 1st Class, of the Royal Norwegian Order of St. Olav for his contribution to medical research and the improvement of medical care in developing countries.

«I started my academic career in Bergen,» he says, «where in 1966 I completed my doctorate on autoantibodies and genetic studies of the antibody molecule

«But family-wise what has left its deepest mark on me is that my mother lost her own mother in childbirth in 1907»

IgG. I went on to a 12-month post doc position at Rockefeller University in New York, where I worked under Professor Henry Kunkel, a world leader in immunology research. This was highly stimulating, and on my return to Oslo I was much better equipped to develop immunology as a specilised discipline in Norway.»

Dr. Natvig was actively involved with developing the combination of basic and clinical immunology. He came to the discipline via rheumatology, where immunology proved to be of key importance to the inflammation process in joint tissue. The study of autoimmune diseases could pro-

vide new knowledge about the basic disease processes.

«In partnership with assistant senior consultant Ove Mellbye we built up a laboratory where the research fellows would also take part in the routine chores, like following up blood tests, biopsies etc., using new immunological methods. Stig Frøland, Gunnar Husby, Einar Munthe, Bodvar Vandvik and others were working here, thus providing support for the treatment of patients while also obtaining valuable patient material for their research. The research included immunological reactions in rheumatoid arthritis tissue, the discovery of entirely new markers for identifying human T and B lymphocytes and the description of amyloid proteins that may result in amyloidosis.»

Through the years, Jacob Natvig has taught immunology to thousands of Norwegian medical students. Most physicians who trained in Norway before the year 2000 will most probably remember the classic textbook *Medisinsk immunologi* by Harboe and Natvig. Furthermore, with other Scandinavian colleagues they set up the *Scandinavian Journal of Immunology*, in 1972. At that stage, immunology had become an established discipline, clinically as well as with respect to basic research. They worked together as principal editors for 25 years. Natvig is still involved as a senior member of staff.

Maritime family background

His CV, as long as your arm, bears witness to an extraordinary capacity for work.

«That is because I'm an unusually good sleeper,» he says, «which is something I have from my mother, in combination with reasonably good health. Admittedly, I have lived half my life on medication to lower my blood pressure and in the last couple



Photo: NTB scanpix

Jacob Birger Natvig

Born on 6 December 1934 in Oslo

- Cand. med. Oslo University, 1959
- Dr. med. Bergen University, 1966
- First head of and senior consultant at the Rheumatology Research Department at Oslo University Hospital – Rikshospitalet (later the Department of General and Rheumatological Immunology), 1967–77
- Founder and principal editor of the Scandinavian Journal of Immunology, 1972–2001
- Director of Oslo University Hospital Rikshospitalet, 1978–86
- Professor of medicine (immunology), Oslo University 1986–2004
- Senior consultant at the Department of General and Rheumatological Immunology (later the Institute of Immunology) at Oslo University Hospital – Rikshospitalet, 1986–2004
- President of the International Union of Immunological Societies, 1989–1992
- Knight of the Royal Norwegian Order of St. Olav for his contribution to Norwegian research, 2009
- Professor emeritus 2005-present day
- Chairman of the Board for the National Medical Museum Foundation, 2002–2014

of years I have also been walking around with moderate atrial flutter. But this has not restricted my activities.»

He picks up a framed quote he brought with him from New York, and which has been hanging on his office wall ever since: «Happy are those who dream dreams and are ready to pay the price to make them come true.»

«Working to achieve something always comes at a price,» he says. «What price have you had to pay?»

He hesitates.

«I have had to sacrifice some of my family life. I have always tried to make sure that we spent high-quality time together, for instance while at the holiday homes we saved up for, in the mountains at Ål and by the sea, on an islet in the Mefjord. My wife, however, has been wonderful and has managed to deal with a lot of things on her own.»

«I am sure I could have been a better dad as well,» he adds thoughtfully. «You tend to think about that sort of thing later on – when looking back.»

Considering his significant maritime family history it was far from obvious that Natvig would end up with a career in medicine. His father was a businessman, but advised his son to focus on the sciences for his A levels, as this would keep his options open. And this led him to medicine.

He served his military conscription period as a navy doctor, which took him to Bergen and Marineholmen, where the Norwegian Navy was based at the time.

«The Håkonsvern naval base was established after my time, I'm pre-historic,» he laughs heartily. «I ended up applying for a job as assistant physician at the Gade Institute, under Professor Waaler, world famous for having discovered rheumatoid factor. I performed autopsies and similar procedures, but was encouraged by Olav Tønder to do my doctorial work at Broegelmann's research laboratory, which was the centre of immunology research in Bergen.»

He gets out an old photograph from the celebratory doctoral dinner held at his home in Øvrelia in Bergen. Around the table sit men in tails, women in fancy 60s dresses and hairdos, all engaged in lively conversation, it seems.

He points to one of the women. «This is my wife, Harriet – she comes from Kristiansund. We met at the so-called Chapel in the Forest near Oslo, Nordmarkskapellet, where I was in charge of a Christian students' camp. For my residency I ended up at Orkdal hospital and in Averøya as a district medical officer, which gave us an opportunity to develop the relationship further.»

«We have now been together for 55 years,» he continues. «We have four chil-

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dren, three girls and a boy, and now we also have four children-in-law, 13 grandchildren and one great grandchild.» With pride he shows me a new photograph showing the whole family together.

Passionate about history as he is, Natvig gives an engaging account of his family background, several generations back. His parents came from western Norway, his mother from Bergen and his father from Stavanger. His great grandfather, Sjur Flage, originated from a tenant farm at Bulken near Voss and travelled down to Bergen. He was an energetic man who married well and set up the Flage shipbuilding yard at Laksevåg. His paternal grandfather ended up a marine engineer working for Bergens Mekaniske Verksted. His paternal great grandfather, Tomas Natvig, was a ship's captain working for Kielland. He was later to become a chief ship pilot and a member of the Norwegian parliament.

«Many have said that he was one of the people on whom the novelist Alexander Kielland modelled *Skipper Worse*, who uttered the famous line: «We arrive late, mr. Kunsel, but we arrive safe», having sailed the bark Ledaal safely home from South America. Given this family history, there was no alternative to the Navy for me during my period of military conscription,» he says.

«But family-wise what has left its deepest mark on me is that my mother lost her own mother in childbirth in 1907. She never got to see her mum and she was the first child. This was something my mother carried with her all her life. She herself gave birth to five children and was very close to us all. She cared for us in the most wonderful way. Mum gave birth to me at the Rikshospitalet's Maternity Clinic and from there, she wrote her mother's sister a beautiful letter saying that it was not until then that she fully understood how horrific it would have been for her own mother to die, leaving behind her newborn baby.»

In charge of it all

When Natvig was starting out as a medical student, he applied for a job as a porter at Oslo University Hospital – Rikshospitalet. He was later to become a senior consultant there, as well as its Director.

«One of my most useful qualities as a hospital director, was that I had once been a porter and had experienced the hospital from that angle.»

«Being a hospital director is a very different role to being a research scientist or senior consultant. What was it like?»

«Extremely exciting,» he responds immediately. «I had already been the staff representative on the Board for four years, and had positioned myself clearly in that role, so was asked to put my name forward for the position. I had three objectives when I first took on the director's job. One of them was financial control, which had been a problem for the hospital. The second was improvement of the fabric of the hospital buildings, which were old and dilapidated. Gradually, I came to the realisation that moving premises was the best solution, and managed to overturn the plans to build an extension to the old hospital, in favour of a project at Gaustad. The third objective was my ambition to facilitate pioneering medical procedures.»

«Internationally, heart transplant surgery had progressed significantly, and because the hospital had already been performing kidney transplants for many years, it appeared to be a matter of course that we should try to progress within this area of

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medicine. Besides, the hospital had an excellent coronary surgery team, headed by Professor Karl Victor Hall.» Jacob Natvig took the decision that the hospital should invest in developing its expertise in this respect and set up a multidisciplinary committee to progress the matter — on the quiet.

«I took on the directorship so I would be able to contribute to medical advances, for the benefit of the patients,» he adds, «not to be a bureaucrat. When we had reached the point that we felt we would be able to successfully transplant a heart, I gave the go-ahead, but insisted that we would have to make it happen within our current budgetary restrictions. That was all the involvement I wanted to have. The patient was to be selected based on medical criteria. However, I did concede that they would be welcome to give me a ring once they had finished.»

This is how Oslo University Hospital – Rikshospitalet, as we know, became the first hospital in Scandinavia to undertake this complicated procedure. Later on, Natvig got to know the patient well, whom he recently met only a year ago when they celebrated the 30th anniversary of the first heart transplant. In 1983, when she received her transplant, she was only 22 years old. She has now lived much longer with her transplanted heart than her original one.

«It is extremely touching to meet people who have received a transplant and who have gone on to live for decades with their new organ. That sort of thing makes a big impression!»

In 1986, after nine demanding years, Natvig stepped down as Director and returned to his senior consultant position and professorship at the Department of Immunology. He also resumed his research work which he actively pursued until his retirement in 2005.

«We found ourselves in the situation that the Board disagreed with me about certain issues, so at that point I was asked whether I would consider stepping down. Which I did, even though I was asked by Minister for Social Affairs, Leif Arne Heløe, to continue. A week after I stepped down as Director, I was elected President of all the 30,000 immunologists in the world, as head of the International Union of Immunological Societies.»

Medical museum curator

For a number of years Natvig has involved himself with medical museum work, under the auspices of the National Medical Museum Foundation, which he chaired for 12 years.

«In short, we set up a foundation in 2002 in order to preserve and develop a medical museum involvement. There are 11 people on the Board, and the Friends association has a membership of about 150. We organise workshops, curate exhibitions and organise trips to visit medical museums around Europe. We have considered it important to develop a collaborative partnership with the National Museum of Medicine at the Norwegian Museum of Science and Technology.»

Natvig also helped save the old Maternity Clinic at Rikshospitalet, where he himself was delivered by forceps in 1934, from being sold to property developers. The building has now been refurbished with many of its original features retained. It now houses the Norwegian Knowledge Centre for the Health Services among other groups associated with the medical sciences and healthcare, such as the Norwegian Medical Society and the National Medical Museum Foundation. These groups still meet in the grand old auditorium where numerous generations of doctors and midwives attended lectures in gynaecology and obstetrics until the year 2000.

Another story from the Maternity Clinic dates back to the Second World War, when its attic held the main radio transmitter used for sending communications between the Norwegian resistance movement Milorg and London. Knut Haugland of heavy water

sabotage fame, and who also later joined the Kon-Tiki expedition, was the radio operator who ensured that these communications were transmitted.

«I came to know him through our foundation, when he was invited to talk about his exploits at the Maternity Clinic during the war. Also, I took the initiative for his biography to be written up. This was a month before he turned 90.»

Natvig himself grew up a stone's throw down the hill from where he lives today, at Holtet, directly opposite the primary school. He remembers the day that Norway was occupied by Germany, 9 April 1940, as if it was yesterday. In the morning, before the roads were blocked, his family fled to Hauger Farm at Hedmarken. They remained there until the war was over.

«I was five years old, but still remember having to flee from the German soldiers. I walked in a long procession of refugees, holding on with my right hand to the pram that held my younger brother, two years my junior, and that was being pushed by my mother.»

«Do you still have more to give?» I ask.

«Certainly! I play an active part in my local community, for instance at the Bekkelagshjemmet, which is our local care home. I have also been actively involved for many years with parish work at Bekkelaget church w

In addition, he also has a new project on the go, in the shape of the old military hospital from Oslo's Empire Quarter, now located at Grev Wedels plass. The building used to house the very first Rikshospital from 1826 to 1883, before it moved premises to Pilestredet. He hopes the building can be put into use once more for medical and healthcare purposes and has joined a foundation working towards this end, named Tomorrow's Health in translation. Jacob Natvig builds brick by brick and is a master of enlisting people to his team, so don't be too surprised if something comes of this initiative as well.

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