



Harm Kuipers

Sport and exercise as a crowning achievement

By Loek Kusiak

He started out as an endurance athlete – a man of great persistence – a characteristic that came in quite handy for Harm Kuipers when he developed the department of Human Movement Sciences at Maastricht University (UM). Now, 25 years later, the time has come to honour this professor of Sport, Physical Activity and Health with a symposium, to be held coming November.

“Seventy percent of sporting achievement is based on talent. Without it you can train all you want, but it won’t get you at the top. I started skating in Drenthe when I was five. Had I been born in Switzerland, I might have become a cross-country skier”, says Kuipers in his office at the Universiteitssingel in Maastricht. The now 62 year old professor of Sport, Physical Activity and Health looks nothing like a man at the threshold of retirement – ever still the enthu-

siastic storyteller, slim and strongly built due to hours spent training on the ice and racing bike.

As a skater, Kuipers won the gold medal in 1975 at the all-round World Championship. Remarkably, he coached himself – meaning he was not a member of the national team – and combined professional skating with a study in medicine in Groningen. On 1 July 1976, after passing his medical exams, Kuipers – “on account

of his fame” – came to Maastricht. Rob Reneman, at that time professor at the Physiology department, had requested Kuipers’s help in setting up a new research group: Exercise Physiology and Sport. “The combination of sport and science was more appealing to me than just doing clinical work.”

Overtraining

Kuipers: “We knew that sports and exercise was beneficial to health, but knew very little about how far you could go. That was my starting point, together with my colleague Frans Verstappen, also a co-founder of the department of Movement Sciences. It didn’t take long before we were international leaders in research in the field of overtraining and muscle overuse. Overtraining causes muscle damage. In some cases, this damage can even be fatal. We also developed a test to prevent overtraining. And the Ministry of Agriculture even funded a study into overtraining in racehorses.”

Looking back on a quarter-century of movement sciences in Maastricht, Kuipers has no trouble coming up with a list of notable achievements. “We were also at the forefront of sports nutrition drinks, and got companies interested in producing these nutritional products.”

Sectioned off

Appointed in 1992 as professor of Physical Activity and Health, and as head of the department, Kuipers focused on strengthening the role of physiology. “Up until that time, biomechanics had a strong influence on the curriculum, and there were different sections within the department that did not communicate with one another. Finding the common ground between these disciplines made it possible for them to benefit from each other’s work.”

Kuipers also played an important part in developing research into type 2 diabetes. “Type 2 diabetes and obesity are real western diseases, and they start with school children not getting enough exercise. The research into diabetes really blossomed under Hans Keizer’s leadership. UM is a leading institute in the field of diabetes research and molecular biology. The work we do, also in nutritional research, has been copied by others. Science is a mix of opportunism and competition, where first place is constantly being won and relinquished.”

Kuipers has published more than a hundred academic writings and various books. “Competition between researchers of various universities is a good thing, but you shouldn’t push researchers too much. Increasing

publishing demands as well as job insecurity due to budget cuts do not improve the quality of research.”

Unnecessary paperwork

Kuipers is proud that the “Voortgangstoets” (an overall progress test) at the faculty has been scrapped, a goal he worked on for years. “That test was completely redundant. Scrapping it has saved manpower and perhaps even improved student grades.”

Through the years, Kuipers also saw how the various forms of funding for research changed. “Government funding has been greatly reduced and replaced by external funding. We’re doing quite well in this area. Our research is funded by sports organisations such as NOC and NSF, but also by DSM and other companies that focus on nutritional research.”

When it comes to government funding, Kuipers believes bureaucracy has gone too far. “The ethical testing committees have often been a source of irritation for me. Unnecessary discussions and needless paperwork. It’s happened that, years after an article about some study or other was published, one of those committees suddenly requests that this or that form be filled out.”

Doping

Two years ago, Kuipers passed on the administrative tasks of heading the department to a younger colleague: professor Matthijs Hesselink. “Ever since, I have been carrying out research again. Just like in the early days. Really great.”

As a doping expert, Kuipers also worked for the World Anti Doping Agency (WADA) for several years. He now uses this knowledge in his work for the International Skating Union (ISU). Thanks to Kuipers’s findings, suspicious substance levels were discovered in professional skater Claudia Pechstein’s blood, leading to her suspension.

“You can’t eradicate doping entirely”, says Kuipers. “But we shouldn’t overrate the effects of performance enhancing drugs either. There are many examples of athletes who, after months of being suspended for doping, continued to participate in top level sport.”

Starting in 2011 Kuipers, in the run-up to his emeritus status in 2012, will reduce his work activities. At the symposium this autumn on 25 years of Movement Sciences, he hopes to bump into many alumni. “So we can catch up, share knowledge, look back on the gaps our research has bridged by putting results into practice. But we will also discuss new developments.”