It is a great honour for me to present the Knud Jansen Lecture. I will not present results of studies and research here, but I hope that I will be able to share some of my personal views and experiences and present some particular considerations.

I am a medical doctor. After having taken my degree, I specialized in paediatrics and decided to spend some years in developing countries in order to offer my services in places where specialized medical doctors were practically unknown. I worked as a volunteer for 6 years in remote rural areas of Uganda and Kenya. I learnt a lot about the conditions of people in this part of the world. I touched by hand what it means to be in a hospital with insufficient qualified staff, without proper drugs, and how difficult it is to remain up-to-date with the developments in your profession under such conditions.

After the period in Africa, I again joined the university. After specializing in child neurology and psychiatry, I became head of a children’s rehabilitation department in Italy. All this time, my interest in developing countries remained very strong and when I was requested by an Italian non-governmental organization (NGO) to make short voluntary consultancy missions for them in the leprosy field, I immediately accepted this. In this capacity I visited many developing countries, especially in Africa and Asia. It also gave me the opportunity to see many orthopaedic workshops, where shoes and prostheses for persons with leprosy were produced.

Many of you know how a workshop in a developing country may look like. On my visits, I met with the persons in charge of the workshop and with prosthetics and orthotics (P&O) technicians. I was impressed by the hard work done by them under such difficult conditions. Discussing with them, I started to learn about their difficulties. I saw the problems: lack of funds; lack of proper raw materials and components; lack of trained professionals; lack of up-grading possibilities, etc. In addition, the staff had frequently to face criticism from donors’ consultants, who, based on their short visits, would often complain in their reports about low productivity, low quality, etc. It is not an easy job for the P&O staff who often have little or no recognition at all in their countries.

In 1990, I was appointed chief of the rehabilitation unit of WHO Headquarters in Geneva. Though it was a considerable change for me to move from working closely with disabled children and their families to a job in an office, the new work offered me the possibility to dedicate my full time to developing countries, not only during weekends and annual leave as had been the case before.

Very soon after starting my new job I travelled to Alexandria in Egypt for a meeting on training of P&O personnel in developing countries. This was the first and a very important contact with international professionals in this area and it was my first contact with ISPO and other international NGOs. I met many highly qualified colleagues who were very dedicated to this field and determined to find good ways to
support P&O development in developing countries. Two of them were, for example, Professor John Hughes and Mr Sepp Heim.

Several important issues were discussed at the meeting and some problems stood out very clearly, for example that:

- the P&O services are often limited to the capital or major provincial cities;
- the services often focus on prosthetics production, though there is a greater need for orthotics;
- the number of P&O personnel in developing countries is completely insufficient;
- category 1 professionals are needed for the supervision of training and education, and as consultants;
- the P&O schools are insufficient in number to cover the demand for professionals;
- it is difficult to find funds for the training; the students themselves cannot meet the costs and it is difficult to find fellowships; and
- many of the students that are trained cannot get employment in their home countries – some of them therefore emigrate.

Clearly, this is not an easy situation. The meeting tried to see some solutions – one of them being the introduction of short (1 ½ year), specialized courses in either prosthetics or orthotics. I appreciate the commitment with which the participants tried to find new ways to tackle the problems, still making sure that the quality of the profession would not be undermined; professionals must be well trained, *in particular* if they are to serve in developing countries. The main recommendations of the workshop have been implemented in cooperation with the training centre in Tanzania, TATCOT, under the leadership of Mr Harold Shangali.

I am very grateful to the ISPO members for their commitment, for defending the profession and for being open to new solutions. As head of the WHO Rehabilitation unit, I have had the pleasure to join efforts with ISPO for improving P&O services on a number of occasions, two of the more important being the consensus conferences on appropriate prosthetic/orthopaedic technology held in Phnom Penh, Cambodia, in 1995 and in Moshi, Tanzania, last year. The two meetings have been of major importance for the development of appropriate technology and “appropriate thinking” in this field. This also prepared the way for a discussion on “appropriate quality”, which I personally believe will be the next important issue to consider.

Particularly important for me have been the contacts with Mr Sepp Heim, whom I met again in Beijing, where we shared difficulties, expectations and dreams. I appreciated his willingness to work with governments in developing countries, his efforts to improve the production of components and his hard work to establish qualified schools.

In 1993, ISPO was recognized by the World Health Assembly as an NGO in official relationship. This formalised our collaboration and made it closer. I am very grateful to Mr Norman Jacobs, the President of the Society, for initiating discussions with us and with international NGOs on how to link P&O services to community-based rehabilitation (CBR) and primary health care (PHC). This linkage will be very important for P&O services, especially in developing countries where services are normally very centralized and not easily accessible for persons with disabilities living in rural areas. The collaboration between P&O and CBR will improve needed follow-
up and stimulate important exchange of information. A project studying the possibilities of linking P&O services to CBR is now carried out in Viet Nam and we are expecting important results.

Having worked for WHO for more than 10 years now, I have had numerous meetings with representatives from Ministry of Health and Ministry of Social Welfare. I have learnt that P&O is rarely seen as a priority and that the interest of government officials for P&O is generally limited. The P&O profession is not always understood. The medical professionals are not used to working jointly with the P&O personnel; they frequently prescribe orthopaedic devices without sufficient knowledge and without any closer collaboration. The fact that orthopaedic workshops are often far from the hospitals makes it even more difficult.

This is a problematic situation: Without proper contacts with the medical field, the P&O services will not get the feedback they need. For the provision of good services, teamwork is needed, in order that all professionals can share their knowledge and contribute to a common goal, i.e. improving the quality of life of persons with disabilities. This became even clearer to me in 1998 when Mr Anders Eklund joined the WHO Rehabilitation Unit. His experiences from the prosthetics/orthotics field added new perspectives and P&O became an integrated part of our work.

Our vision in WHO today is that P&O services must be an integrated part of rehabilitation and possibly a component of the community health care system. It is a long way to go to achieve this, but let me indicate some steps that could be taken in that direction:

1. WHO should continue to create awareness through inter-country workshops at regional level in order to convince responsible persons in Ministries that P&O services are an important component of rehabilitation.
2. WHO should create a network of collaborating centres for P&O in order to strengthen research, coordinate work and provide countries with education and consultancy at sub-regional level. The web will be an important instrument here. In this respect, I would like to mention that a pilot project has just started in El Salvador.
3. The cooperation between P&O services and disabled people’s organizations (DPOs) must be reinforced. Persons with disabilities must have a say in the organization of services and will be our supporters.
4. Orthopaedic workshops need to be located in or near the hospitals.
5. P&O students should share medical and rehabilitation courses with physiotherapist and occupational therapist students in a training that is linked with the university.
6. P&O staff must work in a multi-disciplinary team with surgeons, physiotherapists, occupational therapists and other professionals in order to provide a reciprocal consultancy.

We believe that these steps, among many others, could improve the recognition of this important profession, especially in developing countries.

Thank you very much for your attention.