

## Education and Training

The Research and Development Division of the Prosthetic and Sensory Aids Service, also physically located in New York, has the primary responsibility for VA education and training in prosthetics and orthotics. The VA Prosthetics Center, however, supports these activities by guidance in curriculum development, by visual aid design and production, by technical reports, manuals, and articles, and by providing lecturers and instructors for seminars and courses. Also, the Center conducts on-the-job training for several kinds of students.

It seems reasonable that a center active in a broad spectrum program for prosthetics and orthotics restoration would indeed also be involved in education and training; particularly as the products of research and development become available, there is need for dissemination of information on the new devices and techniques. A government limb and brace activity attempting to practice the best and latest techniques developed by itself and others also provides an excellent facility for on-the-job training of orthotists and prosthetists.

Nevertheless, we know full well that only those who are willing and able to learn can teach. Indeed, the reservoir of prosthetic knowledge grows steadily, and especially he who might choose to teach must keep his knowledge in constant repair. Consequently, the leading journals and all publications, domestic and foreign, are made available to the Center's staff and are reviewed and group-discussed. In addition, intensive communication is maintained with American and foreign research and clinical centers. Members of the teaching group are often sent out to get first-hand insight, to keep abreast of "prosthetics on the move," home and abroad.

Only so, can cross-fertilization of knowledge and a sufficient transfer of new ideas be achieved. Only so, can the teachers be well-taught.

It has been generally recognized that the nationwide establishment of orthotics and prosthetics clinic teams was a major step forward, not only in clinical practice but in education of the team members. Sometimes, for quite understandable reasons, these teams do not always function at the summit of efficiency, but all seem to be rising to the challenge and are constantly improving. The VAPC has an Orthopedic and Prosthetic Appliance Clinic Team meeting weekly under the leadership of a consultant, but it is also fortunate in having available, full-time and under one roof, a surgeon, prosthetists and orthotists, and therapists with whom it organized what may be called the "Instant Team" to be assembled with "push button" speed anytime a case of "Clinic Team" substance comes in. This arrangement has proven so strikingly valuable in many respects, particularly in educating our educators, that its adoption by other institutions wherever possible is highly recommended.

A four-year program of full-time and salaried apprentice-training has been organized in the VA Prosthetics Center to prepare carefully selected high school graduates as orthotists or prosthetists with certification as a goal. The education, although including all necessary craft activities, focuses on the professional responsibilities of the discipline. For example, year-round courses in functional anatomy are given to the trainees as well as to regular staff members. Special lectures on mechanics, materials, and

principles underlying limbfitting and bracing are presented at appropriate times during a trainee's four-year tenure. All trainees are also given a brief, yet comprehensive research and development experience so that they may become familiar with the rationale underlying the methods used.

The four-year training program is primarily intended for United States citizens. Nevertheless, many foreign technicians supported by various international organizations are assigned to the Center, after appropriate clearance, for varying periods of time to learn about modern American methods and devices. Most of this unsalaried training is craft-oriented but discussion of the fundamental principles underlying any new technique or device is always provided. The VA assumes no financial responsibility for expenses incurred by such trainees.

On a number of occasions, American and foreign physicians have spent varying periods observing activities involved in the production of artificial limbs, braces, and orthopedic shoes or the research activities associated with these programs. In several instances, physicians were given job-training in the fabrication of prostheses, braces, or shoes.

Regular one-week courses in prosthetics and orthotics are held in New York periodically with VAPC personnel providing most of the faculty services. The Research and Development Division of PSAS sponsors two such training programs per year for physicians, therapists, prosthetics specialists, and orthotists from Veterans Administration installations all over the country. Lectures on prosthetics and orthotics, with particular emphasis on the newest devices and techniques, are supplemented by demonstrations and practical work sessions. Occasionally, a course of this type will be organized in another city with instructional personnel from the New York activities.

Periodically, special training courses are given to certain VA employees. For example, the use of the casting stand in the fabrication of above-knee and below-knee brace supports and for sockets to be used in temporary prostheses were taught to VA orthotists to assist them in their regular VA brace shop responsibilities.

Upon invitation, VAPC personnel have conducted lecture and demonstration programs at local VA stations or Area Medical Offices. These are usually one or two-day sessions to which commercial prosthetists and orthotists and private practitioners from the region of the VA station may be invited.

Special seminars are occasionally conducted at AOPA meetings or at least in collaboration with AOPA. A typical example was the recent series of seminars on fluid-controlled mechanisms, a PSAS program involving VAPC, Research and Development, and some university personnel.

In addition to these programs of education and training, the VAPC also prepares for the PSAS manuals, brochures, and pamphlets. Its staff has made significant contributions to the literature. Prosthetics and orthotics information dissemination responsibilities also include replies to daily inquiries on problems confronting VA and other clinicians and practitioners. Many such inquiries come from overseas.

The Center and the R&D Division have a huge photographic file including color slides, as well as motion pictures, microfilm and patents, which facilitate information dissemination. Visual aids, models, samples and other training aids useful in educational programs are produced routinely, both for lecture-demonstrations and the permanent exhibit associated with the offices of the Research and Development Division in New York.

From time-to-time, Center personnel are involved in international conferences and seminars or courses. Most particularly, the international prosthetics courses, sponsored by the Committee on Prostheses, Braces and Technical Aids of the International Society for Rehabilitation of the Disabled, have been supported by faculty participation. Also, regional seminars in several parts of the world have been organized by Center personnel in cooperation with several international organizations and with the support of the governments involved.

We of the VA Prosthetics Center hope that what we have done and what we aspire to do may have some impact on national and international progress in prosthetics and orthotics, especially in constantly raising the level of practice by technical improvements and through education and training. We believe that every contribution is needed since after all, the field of orthotics/prosthetics is now and will always be pretty much unfinished business.



### **Dr. Rosenkranz's Prosthetic Splinters III.**

1. STABILITY itself is nothing else but instability in slow motion.
2. ANATOMY OF THE HUMAN BODY: If one knew how the body is made, he would not dare move; Physiology: If one knew how it works, he would rejoice in making it work.
3. To the prosthetist who frowns upon alignment devices: INTUITION is that strange instinct that tells the limbfitter he does right, whether he does or not.
4. Prosthetics should be planned on physiological lines, not by mere carpentry.
5. Some prosthetists I have met were still young enough to know everything.
6. When the stump turns blue, it is the limbfitter's turn to blush.
7. The prosthesis is to the stump what a house is to the individual: A machine to live in. (after Frank Lloyd Wright).
8. How many COMING IMPROVEMENTS has one known! Where on earth do they all go to?
9. Nothing will ever be attempted if all possible objections must first be overcome. (after Samuel Johnson).
10. If you think of STANDARDIZATION as the best that you know today, but which is to be improved tomorrow—you get somewhere. (Henry Ford).
11. The LARGEST ROOM in the world is the room for improvement.
12. RESULTS! Why, man, I have gotten a lot of results. I know several thousands that won't work. (Thomas Edison).