

Neuro-Ophthalmology in Switzerland

Klara Landau, MD

Historical Background

Neuro-ophthalmology in Switzerland stands on the shoulders of giants. One hundred fifty years ago, Friedrich Horner was the first ophthalmologist to hold an independent chair at the University of Zurich. Hans Goldmann invented—among many other examination techniques—the kinetic perimeter named after him while teaching and working at the University of Bern. Adolphe Franceschetti made important contributions to the understanding of genetic diseases and to color vision while at the University of Geneva. While serving as chair in Lausanne, Marc Amsler developed his famous “Amsler grid,” thus pointing out the importance of the central visual field. Volker Henn made seminal contributions in the fields of ocular motor and vestibular research in the Department of Neurology in Zurich.

Close collaboration with 2 famous neurosurgeons in Zurich, Hugo Krayenbühl and “Neurosurgeon of the Century” M. Gazi Yaşargil, brought Alfred Huber’s career to fame far beyond the Swiss borders. His book “Eye Signs and Symptoms in Brain Tumors,” which first appeared in 1956 in German and was later translated into English, represents a marvelously documented account of his vast clinical experience as the first Swiss neuro-ophthalmologist (Fig. 1). Alfred Huber together with Tom Hedges founded the International Neuro-Ophthalmology Society (INOS) and together with Adolphe Neetens from Belgium established the European Neuro-Ophthalmology Society (EUNOS). Two INOS meetings have taken place in Switzerland, the third meeting in 1980, organized by Alfred Huber in Valbella in the mountains of Grisons, and the 15th meeting, organized in 2004 by Avinoam Safran in Geneva. Zurich was the site of the first EUNOS meeting in 1993.

Switzerland’s Society and Health System

What is special about Switzerland and how does it affect our subspecialty? It is a country of 7 million people who speak 4 different languages (German, French, Italian, and Romansh). Despite such diversity, the Swiss have a very stable political system that is based on direct democracy and on autonomy of each of its 23 cantons. The main political and social

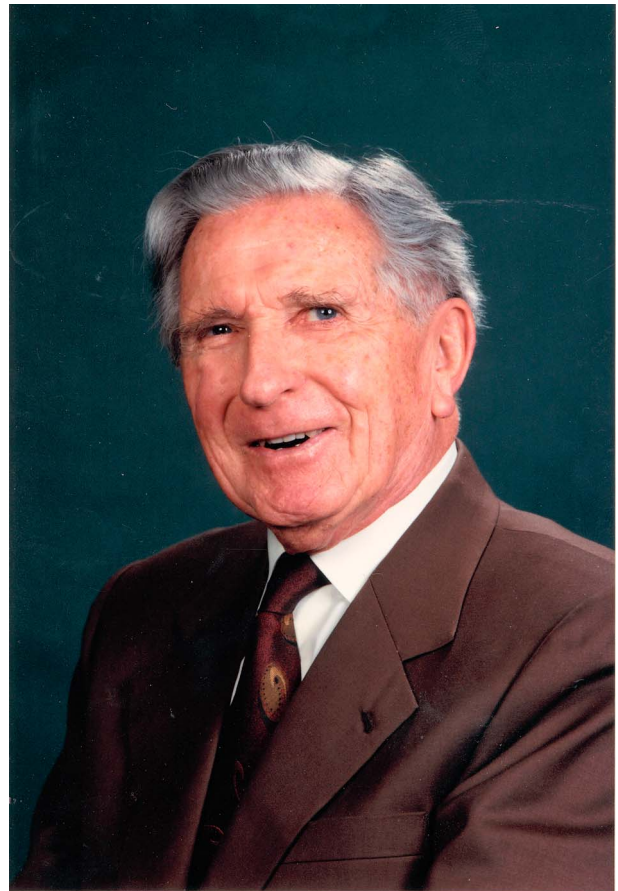


FIG. 1. Alfred Huber, MD, the founder of neuro-ophthalmology as a subspecialty in Switzerland.

attitude is pragmatic collaboration between all parties, requiring the willingness to compromise. This organization works well including the country’s health care system. Five Swiss Universities offer teaching of medical students: 3 in German (Basel, Bern, and Zurich) and 2 in French (Geneva and Lausanne). Less than 1000 medical students graduate each year, a number that is not sufficient to cover the country’s demand.

That is why physicians from other EU countries, mainly from neighboring Germany, Austria, France, and Italy move to Switzerland to work, both in hospitals and in private clinics.

Why is Switzerland so attractive for physicians? There are several reasons including the stability of the country, the

Department of Ophthalmology,
University Hospital Zurich,
Zurich, Switzerland

high quality of health care, and universal access. In addition, 10 years ago, a sophisticated reimbursement system was implemented that is quite unique. It is not technical procedures, but rather time that physicians spend with their patients. For neuro-ophthalmologists, this represents a major advantage.

Neuro-Ophthalmology in Switzerland

Today each large teaching hospital, not just those that are affiliated with the 5 medical schools, have at least a small unit staffed with a fellowship-trained neuro-ophthalmologist (Table 1). These units are mostly, but not exclusively, based in ophthalmology departments and some are located in neurology. Frequently, the neuro-ophthalmologist combines his or her practice with other subspecialties, such as pediatric ophthalmology and strabismus, electrophysiology or orbital disease. There exists no formal Swiss Neuro-Ophthalmology

Society, but rather a group of colleagues who share their common interest and communicate well. Main neuro-ophthalmology centers are currently located in Aarau, Bern, Basel, Lausanne, Luzern, St Gall, and Zurich. For a period of 6 years, 2 of the 5 ophthalmology chairs were neuro-ophthalmologists: Avinoam Safran in Geneva (1998 till 2010) and Klara Landau (since 2005) in Zurich.

The Swiss Ophthalmological Society annual meeting is held each fall alternating among 3 language regions of Switzerland: German (Interlaken), the French (Montreux, Fribourg) and the Italian (Lugano, Locarno). The scientific program always includes a neuro-ophthalmology session. In addition, the group from Lausanne holds regular local neuro-ophthalmology teaching courses in French. In the German part of Switzerland, the neuro-ophthalmologists teach in German at their respective hospitals. For decades, a national Winter Ophthalmic Seminar has been held in one of the beautiful Swiss ski resorts with international

TABLE 1. Currently active neuro-ophthalmologists in Switzerland

Name, City	Training	Mentor, City
Matthias Abegg, Bern	Ophthalmology	Jason Barton, Vancouver
Yael Bellaiche Shavit, Zurich	Ophthalmology	Neil Miller, Baltimore
Anne-Caroline Bessero, Sion	Ophthalmology	James Acheson, London
Francois Xavier Borruat, Lausanne	Ophthalmology	Michael Sanders, London
		J. Lawton Smith, Miami
		Joel Glaser, Miami
		Norman Schatz, Miami
Anna Fierz, Zurich	Ophthalmology	Eric Eggenberger, East Lansing
		David Kaufman, East Lansing
Christina Gerth-Kahlert, Zurich	Ophthalmology	Ray Buncic, Toronto
		Agnes Wong, Toronto
Oliver Job, Lucerne	Ophthalmology	Joel Glaser, Miami
		Norman Schatz, Miami
Aki Kawasaki, Lausanne	Neurology	Robert Yee, Indianapolis
		Stanley Thompson, Iowa City
		Randy Kardon, Iowa City
		Michael Wall, Iowa City
Hanspeter Killer, Aarau	Ophthalmology	Ron Burde, New York
Klara Landau, Zurich	Ophthalmology	William F. Hoyt, San Francisco
Otmar Meienberg, Binningen	Neurology	William F. Hoyt, San Francisco
Daniel Mojon, St Gall	Ophthalmology	Jeff Odel, New York
René Müri, Bern	Neurology	Charles Pierrot-Desilligny, Paris
Anja Palmowski-Wolf, Basel	Ophthalmology	Erich Sutter, San Francisco
		Craig Hoyt, San Francisco
Misha Pless, Lucerne	Neurology	Simmons Lessell, Boston
Dominik Straumann, Zurich	Neurology	David Zee, Baltimore
Veit Sturn, St Gall	Ophthalmology	Klara Landau, Zurich
		Agnes Wong, Toronto
Nadja Tajouri, Sion	Ophthalmology	Joseph Rizzo, Boston
Christa Vollrath-Junger, Zurich	Ophthalmology	Guntram Kommerell, Freiburg
		William F. Hoyt, San Francisco
Konrad Weber, Zurich	Neurology	Michael Halmagyi, Sydney
		Ian Curthoys, Sydney
Hannes Wildberger, Zurich	Ophthalmology	Fried van Lith, Rotterdam
		Harold Henkes, Rotterdam

guests teaching neuro-ophthalmology in English, hosted by local organizers from Lausanne and Zurich. Because of difficulties related to sponsoring regulations, this popular tradition had to be modified and is now available to a rather limited number of practitioners in the German part of Switzerland alone. Irene Gottlob, who used to be in charge of the Neuro-Ophthalmology and Strabismus unit in St Gall before moving to the United Kingdom, established a 2-day spring meeting featuring case presentations in neuro-ophthalmology and strabismus. It has been continued by Daniel Mojon and currently by Veit Sturm. In the summer of 2012, a very successful 2-day practical course in neuro-ophthalmology was held at a lakeside castle near Zurich. The format and the content were prepared by Jonathan Trobe, who delivered introductory lectures followed by intensive work in small groups, supervised by Dominik Straumann, Konrad Weber, and Klara Landau. This course will be repeated in June of 2014 with David Zee joining Jonathan Trobe. It will represent the second EUNOS update course for residents.

Outlook

The future of neuro-ophthalmology in Switzerland will be determined by curious, creative, and passionate young physicians with a genuine interest in answering the many unsolved questions in our subspecialty. It is our responsibility to motivate them and, at the same time, to preserve our favorable health system structures. Looking at the developments in Germany, where neuro-ophthalmology is rapidly losing ground because of shortsighted political decisions and is disappearing from the teaching programs, every effort should be made to avoid a similar development in Switzerland. We owe this to our patients, our colleagues, and our founders including Friedrich Horner, Adolphe Franceschetti, Marc Amsler, Hans Goldmann, Alfred Huber, Volker Henn, and Avinoam Safran.

Klara Landau, MD

*Department of Ophthalmology,
University Hospital Zurich,
Zurich, Switzerland*