

## A varied neuropathology career - turning west and east

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I feel very honored to be included in the list of authors for the “Reflections” series in Free Neuropathology, being that I do not really consider myself as a protagonist of our profession. My curriculum is rather variegated and adjusted to the circumstances, resilient yet as it has been tradition in my ancestry.

### Origin and Childhood

My mother, while just being in labor in an upper floor of a house in Bad Oeynhausen/ Lower Saxony in 1944, refused the usual demand to take refuge in the basement when bombers were approaching. Thus, the world received me with sunshine, and I believe that I had this perception ever since. My mother’s father, author of the “Atlas metallographicus”, saved his position at the University of Berlin during the Nazi-era by falsifying his passport - with the aid of a distant relative who was major in a small rural town and had the suitable seals. My father, having received a degree in chemistry, in World War II suffered a bullet wound with temporal lobe injury and severe meningitis resulting in epilepsy and partial hearing loss, yet he resumed his beloved piano playing and later on even gave regular house concerts. Survival in the post-war famine was not easy, but we were lucky to be assigned as refugees to the farm of some distant relatives (Fig. 1). My father,

before being able to take up a position in chemistry again, gave private school instructions to the children whilst all public schools were still closed.



**Fig. 1.** RS, showing his love for nature early on, with no fears of CJD.

### Education

Being thus born in a family of the “Bildungsbürgertum”, it was only natural for me to attend a “Humanistisches Gymnasium”, a high school with Latin and Greek as major subjects. But I have also good memories of the elementary school: in periods of very warm weather the teacher gave his lessons in



**Fig. 2.** Rowing trip on the Danube River with a crew of old school comrades (RS 4<sup>th</sup> from left).

the nearby park – I am regarding this a good example for the current COVID-19 period. The high school was situated in Hannover, at that time British occupation zone. The school principal, von Drygalski, son of a famous polar explorer, was very proud that we were the first school class permitted to start with Latin instead of English, and that the high school was named after the last German Emperor. To our amusement, the name placed at the entrance repeatedly changed from “Kaiser Wilhelms Gymnasium” to “Kaiser-Wilhelm-Gymnasium”, due to different opinions of the city officials about the nature of this association. Retrospectively, Cancel-Culture does not appear to be an entirely new phenomenon. We received a broad-based education and did not really suffer from gender segregation, being that the girls’ school was located in the vicinity. Sports was also promoted. I spent hours in a rowing boat on the city’s “Maschsee” almost daily, and our team received a number of medals. Even in much later years we still could be seen as a rowing crew, exploring the landscape of the Danube and other rivers on holiday occasions (Fig. 2). Similarly, for my school class the “Abitur” was not the final event, we are still trying to have a get-together each year.

## Studies

To study medicine was a family decision, especially supported by an aunt of mine who had spent her training in internal medicine in the United States. The emphasis on basic medical sciences in the German curriculum was appealing to me, and so was the relative freedom to arrange the order of courses. I was thus able to change the University

three times, from Marburg to Berlin to Göttingen. I was also able to attend voluntary general courses, for example an introduction to informatics given by the computer pioneer Konrad Zuse. Besides I became a member of “Marchia”, one of the oldest German fraternities, founded 1810 in Berlin concomitant with the operative initiation of the Humboldt University. In Göttingen, I had the good luck to get a position as “studentischer Hilfsassistent” at the University Institute for Pathology. This was very advantageous for several reasons. First, I could partially unburden my parents from their monthly financial support. Second, I became familiar with pathological anatomy, since one of my tasks was to prepare and to display organs with characteristic changes suited to the lectures of Prof. Johannes Linzbach, head of the Institute. Apparently satisfied with my work, he soon included me in his invitations of assistants and associates for the occasional barbecues in his private garden. I kept this habit in memory as a good example during my own future career. Third, I had no problems to secure tissue material for the investigations of my doctoral thesis, the histochemical detection of trace elements in the organs of newborns. This work was done at the Max-Planck-Institute for Experimental Medicine under the supervision of Prof. Friedrich Timm, in neuropathology well known in connection with the histochemical Timm stain for zinc in the hippocampus. Graduation in medicine was in 1969, passing one written examination and then oral examinations for each medical discipline at intervals of one week. Candidates were grouped into four, and one of them - I was the one - had to ask each of the chosen professors for the examination date. Our whole group passed summa

cum laude. At the end we happily invited all professors for dinner in a renowned restaurant, and to our pleasant surprise quite a number of them took part in this rather special farewell. Such a ceremony would certainly not have been possible in times where virtually everything is restricted to video contacts.

Following graduation, a year of practical medicine was required to obtain the medical license. I completed this, the final portion at the Department of Internal Medicine of the University of Göttingen under Werner Creutzfeldt, son of the neuropathologist Hans Georg Creutzfeldt. He backed my plans for a year of Pathology in the United States. Prerequisites were in existence, by previous medical clerkships in London and in St. Louis as well as by the ECFMG certification. I was fortunate in that my successful applications included Stanford University, and I also obtained a travel grant of the Fulbright Commission. The travel was very comfortable, and on the "MS Bremen" I assisted the ship's doctor since I was one of the few passengers that did not become seasick.

## Professional Training

The planned one year stay at Stanford, as it turned out, finally extended to four years, mostly due to the support and encouragement of Klaus Bensch. Originally coming from Eastern Germany with rather bad experiences over there, he was one of the professors of anatomic pathology and later on followed David Korn as head of the department. I was trained in electron microscopy for a project of membrane and cell fusion. We did not finally succeed in the aim of introduction of foreign material, but this research was an excellent basis for membrane research later in my career. My living came from my employment as intern and resident, the last two years in the Department of Neuropathology headed by Lucien Rubinstein, and I was working at the University Hospital and in turn at the Veterans Administration hospital. Here, Lysia Forno taught me both the meticulous brain cutting and the very meticulous look at H&E-stained slides, making most special stains confirmatory only. Careful observation was then also the basis for a paper with Mary Herman, the wife of Lucien Rubinstein, describing brain changes following heart transplantation. It was

pleasant to note that with this project we had the unrestricted support of the cardiac surgeon, Norman Shumway. While working in surgical pathology, I made a fine structural analysis of amyloid in a pituitary adenoma, pointing out a possible pathogenetic correlation with beta-amyloid in senile plaques. Upon acceptance of the paper, I was told by the faculty that it had found the interest of Bob Terry. This signified to me that there were no further problems with the extension of my contract. The academic atmosphere was generally very liberal, with staff from many different countries. Coming from Germany I took it as a great privilege to take part. My contemporary fellows were, amongst others, Samuel Ludwin, William Langston, Bernd Scheithauer, and Scott Vandenberg. Of course, we all also enjoyed California, despite Lucien Rubinstein's saying that he would not accept people that evidently came because of the good weather. With my Käfer-Volkswagen, imported when I became chief resident, I repeatedly made tours to Big Sur, to the Sierra Nevada and also to the Christmas tree farm of Jon Kosek, professor of pathology at the VA hospital. Jon used to make this tour by bike, just as he did every day for his way to work. Environmental concerns were already well developed these days, and this was also exemplified by Louis Fajardo, the other VA-professor of pathology. He used to supply the whole department with the giant zucchinis raised in his garden. I also enjoyed a sailing course starting in Sausalito and finally finished with a high-seas sailing certificate. More important, however, were other obtained certificates: the American Board of Pathology and Neuropathology and the California Medical License. Furthermore, membership in the Association of Military Surgeons of the United States, later on helping me to follow my professional career without interruption. At the end it was a difficult decision to leave for a position that was offered to me in Germany, yet I kept all these certificates valid until now by implementing the Continuing Medical Education requirements.

## Early Professional Position

The decision to take up a position at the Max Planck Institute for Brain Research in Frankfurt in 1974 was a fortunate one. Not least so since in the city of Frankfurt I met Emilia Ferrero, daughter of a

Piemontese family that established a new business extension there. The meeting was arranged by Virgilio Rolleri, a member of my fraternity and lawyer of reputation, on occasion of a grand ball. Being married, we continued to enjoy dancing ever since. At the Max Planck Institute I was in good company of international scholarship holders, coming from Turkey, Poland, Japan, Mexico, and other countries. Founder of the Institute in 1962 and head of neuropathology was Wilhelm Krücke, in conjunction with his directory of the Ludwig Edinger Institute of Neurology of the University. I was in charge of the electron microscopy group, succeeding J. Michael Schröder. The instrument was the Zeiss EM9, having good optics but requiring all adjustments to be made by hand and to photographically develop the glass plates. Thus, it was good to collaborate with a Japanese scholar, Yasuhiro Yamamura, on the experimental project, nerve regeneration of the muscle spindle after denervation. We were not successful yet to finish this project in time, and only several years later I reported the differences between motor and sensory nerves in two joint papers. Meanwhile, trying to improve my skills in more up-to-date techniques, I took an EMBO-course on subcellular fractionation at the Max Planck Institute for Biophysical Chemistry in Göttingen. The ensuing collaboration resulted in several papers on membrane fusion. A paper in "Science" resulted from additional collaboration with the other department of the Max Planck Institute in Frankfurt, headed by Rolf Hassler. Diagnostic neuropathology was falling in the competence of the Edinger-Institute and was conducted collectively by Helge Gräfin Vitzthum, Ekkehard Thomas and me. Prof. Krücke, apart from signing out the cases, also rejoiced in some brain cutting personally. This was always a special event for the clinicians, associates and assistants sitting around his table. While dissecting the formalin-fixed organs and laying out the brain slices, he used to tell anecdotes and life stories, often acknowledging the merits of persons that were instrumental in his career. For example, the teacher of Latin at his school in Dillenburg, being very popular but suddenly disappearing due to his Jewish origin and having been saved only by hiding away with some neighbors. Or Hugo Spatz and Julius Hallervorden, both coming from the team of Walther Spielmeyer but having very different character traits, one rather expansive and dominant, the other scrupulous at work, rather humble

and a person of integrity. Or Webb Haymayker, while with the NASA at Moffett Field, kindly providing scientific literature that at that time could not be obtained in Germany. The autopsy material to be dissected and sampled for histology did not only derive from the University Clinics but also from neurologic and psychiatric institutions in the vicinity of Frankfurt. I spent many days performing these external autopsies and hold good contacts with the respective clinicians. A favorite destination was the Landesheilanstalt Eichberg, offering a very pleasant atmosphere irrespective of the dark side of its history, and also the opportunity for me and the autopsy diener to buy some bottles of Rhein-wine nearby. In the context of these activities, on the other hand, I also had a very startling experience. One of the dieners that usually accompanied me was skillful at work, reliable and well disposed toward me. It was somewhat conspicuous that he was always dressed extremely well. One day he did not appear without notice, and we did not see him again. We were then informed by the police that he had died in an exchange of fire, following the discovery of his thefts in a store of elegant menswear.

All dissected brains and spinal cords of interest were permanently saved at the Max Planck Institute, adding to the ones that were already stored in the basement and up to many decades old. Someday I had a request from Heiko Braak for slices that he would embed and cut with his new technique for large sections in the Institute of Anatomy. Following the selection of cases according to the old documents that to a large part were also still existent as well, I willingly went with him through the dark and dusty rooms to find the right buckets. This action, I believe, may have been helpful not only for Heiko Braak's further career but also for the further scientific elucidation of neurodegenerative diseases. When in later years the Max Planck Society decided to bury all this material in a ceremony burdened with guilt, many colleagues were rather bewildered. It was also regarded as fortunate that Wilhelm Krücke, continuing to work for some time in the Edinger Institute as an emeritus together with his successor Wolfgang Schlote, did not live to see this anymore. I thought, in contrast, that he would not have been surprised. He used to recount a special event from his previous time in Bavaria. At the end of the war, when the Allied forces were approach

ing, one could see some formalin-fixed brains floating down the Isar River. They had been discarded by his colleagues in fear of accusations, despite no guiltiness at all. My time at the Max Planck Institute for Brain Research then came to an end since the Max Planck Society closed the department of neuropathology in favor of two neuroscience departments. I was very grateful to obtain a grant for a half-year stay abroad in order to facilitate the search for a new job.

## Advanced Professional Training

I was successful with an application to the National Institutes of Health to study the pathogenesis of idiopathic polyneuritis on patient material, using the myelin protein antibodies against P<sub>0</sub>, P<sub>1</sub>, P<sub>2</sub> and MAG that were newly developed there. In 1979 I thus had the privilege to work with Henry de Forest Webster in the Laboratory of Neuropathology and Neuroanatomical Sciences at NINDS. With the permission of Prof. Krücke I collected appropriate paraffin blocks prior to my trip. Among these was a huge one containing a furred entire sciatic nerve. I personally made sections from this block with an old Tetrandor in the Max Planck Institute, anticipating that such technical facilities would not be present in Bethesda. Harry Webster supported the study by asking for additional material from Harvard University and the University of Pennsylvania. In the end we did not find a pathogenetic association, but the nevertheless ensuing paper was thus co-authored by Edward P. Richardson and Arthur K. Asbury. Another co-author was Yasuto Itoyama, a young Japanese scientist staying there for a longer period. Both of us were well fit for the demanded very careful work, too much so in some European eyes, for example to clean all objectives before taking photos at the Zeiss Axiomat microscope. Harry Webster also invited both of us in turn to accompany him on his frequent if not regular weekend sailings. The boat was specially designed with retractable keels on each side to suit the rather shallow banks of Chesapeake Bay, a challenge even for an experienced yachtsman.

Back in Germany I found a new job in Frankfurt at the Department of Pathology of the St. Markus city hospital. Though not directly subserving my career, the two years that I spent there were required

to obtain the pathology license in Germany since my American certificates were not fully acknowledged. Due to my continuing activity in external autopsies, I could nevertheless publish a paper in Virchow's Archives, a case report of a lymphoma involving the nervous system. Preparing the manuscript, I gratefully acknowledged the hand-written support of Ronald F. Dorfman, my former teacher of surgical pathology at Stanford University and an internationally recognized lymphoma expert.

## Professional Maturity

I returned to neuropathology in 1982 at the University of Düsseldorf, serving as assistant physician in the Institute of Wolfgang Wechsler. In tradition with Wechsler's training by Klaus Joachim Zülch, the research focus in the Institute was neuro-oncology. This topic was strongly picked up by my companion assistant Guido Reifenberger, transiently scholarship holder at the Sahlgrenska-Hospitals in Göteborg and in the later succession becoming head of the Institute in Düsseldorf. My own contributions, resulting from my continuing clinical-diagnostic work, were mostly case reports in collaboration with my very cooperative young colleagues. To name just a few: Eva Neuen-Jacob, specializing in myopathology and later on being in charge of all related diagnostics at the Institute; Martina Deckert, later on head of neuropathology in Cologne; Thomas Bilzer, veterinary neuropathologist and specialist in Borna disease; Reinhard Prior, later on working in Italy and being coordinator of European science projects; Jürgen Kiwit, later on chief physician of neurosurgery in Berlin-Buch; Hiroshi Himuro, fellow in neurosurgery and later on returning to Fukuoka; Stan Krajewski, of Polish origin and later on together with his wife working at the Sanford-Burnham Medical Research Institute in La Jolla. A most welcome collaborator belonging to a different lifespan was Henry Urich, serving as locum tenens for Prof. Wechsler as he had done before in many other places. We signed out all cases together and published several of them, and I profited from his great experience especially in the pathology of peripheral nervous system tumors. I furthermore had a very good collaboration with the Institute of Pathology just some stairs below. Consultations were frequently made with Franz Borchard, assistant medical director and later on chief

physician of pathology in Aschaffenburg. One of the assistants was Karl-Friedrich Bürrig, later on chief physician of pathology in Hildesheim and president of the Bundesverband Deutscher Pathologen e.V. The director of the Institute of Pathology was Waldemar Hort, already known to me from my time as a student in Göttingen. Hort and Wechsler were quite different characters, easily to be seen when on the way to work. The former one bicycling along the Rhine River, the big front basket and the side bags fully loaden with medical papers and documents. The latter one in a Porsche sports-car for the rather long trip from his home in Bergisch-Gladbach, and whenever the sun was shining, with open roof and a white cap on his head. In some nice and hot summer days we sometimes also saw him similarly capped, climbing up the ladder to the roof of the Institute.

My own primary research went in a different direction, the investigation of laser-induced tissue changes in the central and peripheral nervous system. This was a truly collaborative venture, initiated by Hans-Joachim Schwarzmaier at the Department of Laser Medicine. Utilized was a new type of laser, the 1,32  $\mu\text{m}$  Nd:YAG laser, in service by Stefan Hessel at MBB-Medizintechnik GmbH München. The operative procedures on experimental animals were done by Frank Ulrich and other colleagues at the Department of Neurosurgery. In charge of Neuroradiology was Thomas Kahn, continuously collaborating with me in later years in Leipzig as well. The primary goal of the project was to treat brain tumors by laser-induced interstitial thermotherapy in a minimally invasive way. After completion of the experimental phase Frank Ulrich indeed was successful



Fig. 3. My favorite poster, compiled by my friends and colleagues in Düsseldorf. The format of my neuropathology reports is remaining unchanged up to now. [Please click on the figure to download a high-resolution version]

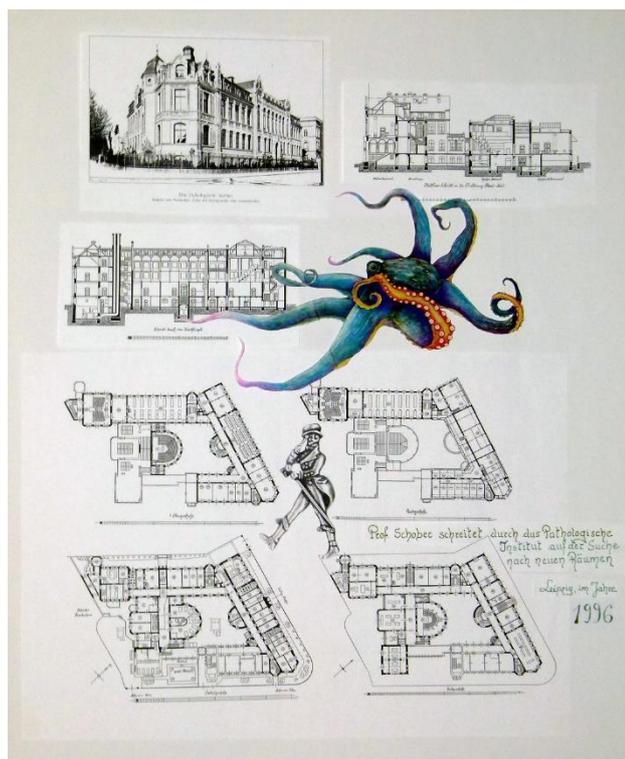
with clinical applications, performed under stereotactic or “open” magnetic resonance imaging guidance. My histologic investigations were acknowledged as an important contribution, allowing me to participate in the Gordon-Research-Conference on Lasers in Biology and Medicine, Meriden/USA. Yet with presentations at some other conferences, I heard rather different commentaries - the mission of neuropathology should be the analysis and not the destruction of tissue. I did not quite agree but in fact I saw the major utility of this laser in tissue welding, especially for peripheral nerve anastomoses. A paper in “Science”, elucidating the fine structural basis for this procedure, was a major module for my habilitation and postdoctoral lecture qualification at the University of Düsseldorf in 1987. Not entirely with pleasure since I lost my job, due to university regulations on fixed-term contracts. Consequently, I pondered an offer of my aunt to take over her practice of general medicine in her nice house in Bad Essen, an idyllic small town at the foot of the Teutoburger Wald. I had already gained some insight there from occasional holiday locums in order to supplement the budget of my family. Some of the good memories were that I never again have eaten such fresh and tasty bread, butter, eggs, and bacon gifted by the grateful farmer-patients. Nevertheless, I declined the offer of my aunt. This turned out to be the right decision since half a year later I could continue at the University Department in a superior position, as deputy medical head. Eventually, applications for an independent position were also successful. I got a very cheerful farewell ceremony when I left to the University of Leipzig in 1994 (Fig. 3).

## Independent Professional Position

In Leipzig, much of what I encountered was unusual at first, but I nevertheless liked it from the beginning. My presentation as a candidate took place in the old Bologna-style auditorium of the Institute of Pathology, originally designed for autopsy demonstrations. Speaking while standing behind the desk at the floor, I was rather confident when I saw Hans Hilmar Göbel and Jorge Cervos-Navarro as members of the committee, sitting at short distance in the first row. My wife, however, was sitting in the top row and became dizzy when looking down. But stepping down after my presentation, she was wel-

comed and accompanied by the local professors in a very warm and polite way, not always her experience elsewhere. Similarly, when I started with my work, it was customary in the morning meeting to first shake hands with all colleagues. I was also very fortunate with the staff that was either assigned to me or chosen by me: my secretary Annelies Krob, prudent and internationally experienced from her previous work at the trade mission of the German Democratic Republic in Japan. My laboratory technicians, starting work in their usual habit at 6:30 a.m., thus having finished some urgent tasks already when I arrived considerably later. My assistant physicians Steffen Kellermann and Dietmar Thal, greatly contributing to establish neuropathology as an independent department, the first one in the area of eastern Germany. Steffen Kellermann had already worked in the Institute of Pathology and continued in my department to organize the “Rätselecken”, diagnostic slide sessions that now were addressing neuropathology. To our surprise and pleasure the auditorium was filled with numerous participants, including well established colleagues coming from distant institutions, such as Werner Jänisch together with Marlis Günther from Brandenburg, or Rolf Warzok together with Silke Vogelgesang from Greifswald. Regarding other participants coming from nearby, we were not always sure about their motives since we heard frequent praises of the dishes and cakes prepared by my wife, served in the break and afterwards. Dietmar Thal soon made contact with Thomas Arendt at the Paul-Flechsig-Institute for Brain Research and with other local researchers, establishing a fruitful collaboration and the basis for his later achievements in the classification of Alzheimer’s disease.

Quite helpful for the development of my department was furthermore a half-year stay of Henry deF. Webster, financed by the Senior Scientist Award of the Alexander von Humboldt Foundation. I could only offer him a very small room as workplace, a transit room to the secretary’s office. When I tried repeatedly and in vain to get a larger room in the Institute, I received the ground plan of the Institute together with a small figure from a well-meaning pathology colleague, Thomas Friedrich, later on pathologist in Zurich. My wife, sawing this, integrated it in an amusing cartoon (Fig. 4).



**Fig. 4.** A unique cartoon of a problem known to many neuropathologists (“Prof. Schober strides through the Pathology Institute, searching for new rooms”).

But Harry Webster was content with a chair and desk for his own laptop since he primarily intended to finish some publications. His stay was greatly acknowledged by the team (Fig. 5). The weekends were usually reserved for excursions together with my family, in return of the hospitality that I had received in Bethesda. Harry and his wife Marion, coming back from stays in her home country Hungary, sat in the in the back row of my van, in front of them our three small children Celestina, Giulio and Giovanni. When exploring old castles and other historical sites we soon noticed that Harry was the only person having a real interest in these, and thus we spent more time in country festivals, markets, and restaurants. It was reassuring to find no pejorative words about this period in Harry’s book of memoirs that he sent me 10 years later.

## Professional Leadership

A major event in my professional life was the “International Symposium and 45th Annual Meeting of the DGNN” in the spring of 2000, organized by my team and me when I was the elected president of the German society for Neuropathology and Neuro-

## Henry deF. Webster

deserves a distinguished service award not only from the AANP but from ALL of us knowing him:  
Leipzig 1997 –  
half a year of overseas foreign aid in the Neuropath Department of Ralf Schober

*Happy faces of all co-workers, in spite of...*



*...the backyard panorama of brick walls falling into shambles*



*...the grim look of the founder of the Institute of Pathology (Marchand)*

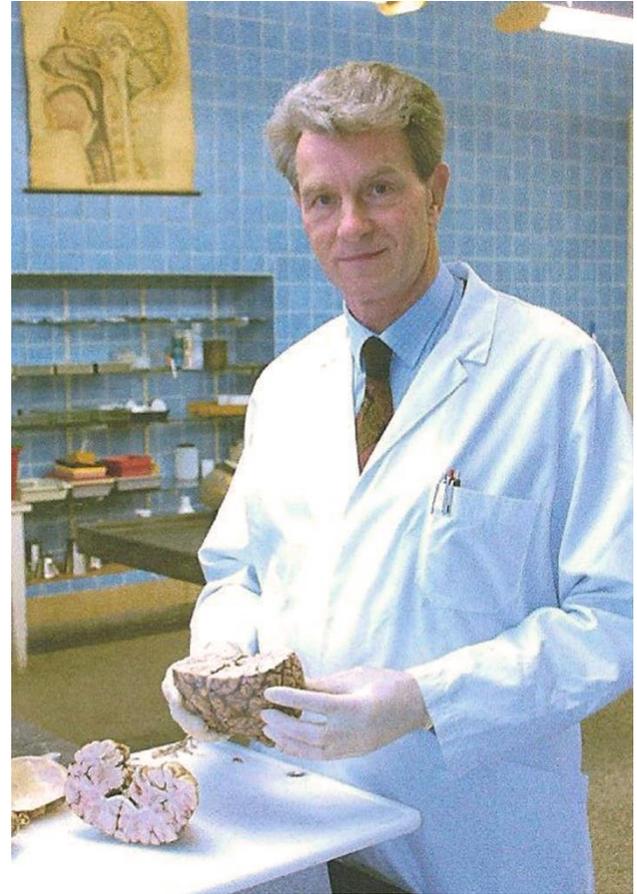
**Fig. 5.** The neuropathology team in Leipzig confers an award to Henry deF. Webster (upper left and lower right).

anatomy. With the generous support of the DFG, BMBF, SMWK, and AvHF, conveyed by Otmar Wiestler and other colleagues, we could invite numerous internationally leading neuropathologists and scientists as speakers and chairmen for the symposium. With some of them I hold long-lasting friendships, e.g., with Davide Schiffer, Janus Szymas, and Alfonso Escobar. The Congress took place in the Mendelssohn-Hall of the Gewandhaus and in representative lecture halls of the University, facilitated by the generous support of industrial and other companies that was gained by our pertinacious personal canvassing. Addresses of welcome were made by Volker Bigl, Rector of the University and previously head of the Paul-Flechsig-Institute for Brain Research, and by Gottfried Geiler, member of the Leopoldina and previously head of the Institute for Pathology. In the following ceremonial act, the Al-

fons-Maria-Jacob-Medaille was awarded to Jürgen Peiffer by Dimitrios Stavrou. Refreshments were offered generously throughout, and at the social evening a free dinner was served in the “Ratskeller”. The Congress finished with a satellite symposium on East-West-Connections in Neuropathology, organized in collaboration with Lothar Pickenhain and with Ortrun Riha, director of the Karl-Sudhoff-Institute for the History of Medicine and Natural Sciences at the Medical Faculty of the University of Leipzig. Referees were Jürgen Peiffer, Loránt Leel-Össy, Irina N. Bogolepova, Hans-Dieter Mennel, Ingrid Kästner, Igor Klatzo, Arcadiu Petrescu, and A.O. Sapetskii. In retrospect we could hear from many participants that they would not have expected such an event to take place in eastern Germany 10 years after the Fall of the Wall.

The neuropathology team in Leipzig was always complemented by younger people, either research students working for their doctorate or student assistants paid with a small stipend. Their selection and supervision were mostly made by Vera Ogunlade, a PhD always good humored, quite necessary for this task. She originated from the Caucasus area, was married in Africa, became a member of the Arnold-Sommerfeld-Society in Leipzig, and following her job in my department she later worked with Hans Kretzschmar in Munich. A very good graduate student was Christian Schulze. Originating from Zwickau and studying in Leipzig, he successfully engaged in my continuing laser project, resulting in several publications. He later worked at Harvard Medical School, then in New York at Columbia University Medical Center, and is now head of cardiology at the University of Jena. Other publications of my department resulted from cooperations with various clinical colleagues, especially with the neurosurgeon Juergen Meixensberger. With his support, my associate Manfred Bauer initiated a long-standing collaboration with the neuro-oncology group headed by Heidrun Holland, using up-to-date cytogenetic and molecular genetic methods. I personally, in addition to neuro-oncological and neuromuscular diagnostics as well as brain cutting for legal and other expert reports (Fig. 6), made some investigations of historical sites and about physicians in Saxony, resulting in contributions to the Periodical of the DGGN (German Society for the History of Neu-

rology). An article about Richard Arwed Pfeifer was made in cooperation with Wolfgang Schlote, another article about Hugo Kufs in cooperation with Hans Hilmar Goebel.



**Fig. 6.** Persistent activity of brain cutting, as usual in a standing position.

Additional professional obligations included frequent meetings as a member of the faculty council and of the graduation committee as well as yearly meetings in Brussels as an EU expert evaluator. This activity has continued without interruption, now however in an online format. Although I see the necessity for video communications, I have to admit that I am missing the personal contacts with the other experts and the concluding dinners together with the staff. Attending the restaurants in Brussels I was usually accompanied by my wife. We usually also went together to the social evenings of various society meetings when held in European countries and not requiring transcontinental flights. I may just name a few such social events, of which we or I have nice and lasting memories.

## Episodes

1. At the 2<sup>nd</sup> Joint Meeting of Hungarian-German Neuropathologists, organized by Samuel Komoly and Katalin Majtényi in Budapest 1999, we enjoyed a barbecue and open dance in the nice setting of a park. At the end there was a dancing competition, with emphasis on Viennese waltz. And who was the winner? Not surprisingly, somebody from Vienna. Herbert Budka stood out by his extraordinary elegance and vigor with switching clockwise and counterclockwise turnings.

2. At the Sixth IBRO World Congress of Neuroscience in Prague 2003, the social dinner took place in the Zofin-Palace, a highly representative historical building on a Moldova River island. The evening was opened by Eva Syková, appearing on the stage in a magnificent long dress with a fur stole. The curtain swept back, and we heard some Czech music very nicely played on a grand piano. The dinner came in exquisite dishes. Starting with the soup, the plate at each place was covered with a high porcelain cap to facilitate a collective beginning, and the following courses of the delicious meal were all individually served just like at court.

3. The 2005 Meeting of the Peripheral Nerve Society and the Italian Peripheral Nerve Study Group took place at Il Ciocco, a very scenic resort in Tuscany. We came by car together with our youngest son and with my parents in law from Torino as additional guests. Having transcended the Apennine Mountains on a very narrow and curvy road, we were hungry and rather happy to see a great variety of delicious dishes lying out as finger food at numerous tables in the big courtyard. All participants of the meeting ate with pleasure, and the dishes as well as wines and soft drinks were replenished repeatedly. Then, to our surprise, the opening ceremony ended with an invitation to walk into the building and to have dinner. This was sumptuous and was served in the traditional sequence of pasta, main dish and fruits and liquors.

4. In contrast to professional trips in Europe, those to overseas destinations I usually made alone. Once a year I applied for a travel grant of the DAAD for a presentation overseas, thus regularly meeting

my American friends and colleagues again at the annual meetings of AANP and/or ASIP in various cities. I usually booked the flight at a considerably reduced price for a whole week, giving me the opportunity to make new friends at local Rotary clubs and to explore further localities.

5. Special mention deserve some very nice experiences that I made in Japan. At the 39<sup>th</sup> Annual Meeting of the Japanese Society of Neuropathology in Fukuoka 1998, president Masashi Fukui invited some speakers and special guests for dinner, amongst others Henry deF. Webster, Bernd Scheithauer, Peter J. Dyck, Dimitrios Stavrou, Akira Hori, and me. The main dish was shark fins, a highly valued delicacy. We were all seated at a round table and thus could well observe how different the skills were to eat with chopsticks and to use the small bowls with soy sauce, rather a challenge with this dish. Several guests gave up and changed over to forks, but nobody was in a hurry. At the end of this cheerful company with a lot of Sake, we had the choice to either take a taxi to the hotel or to continue the party in the rear of the building. Looking at each other we exactly knew in advance what the choices were. The taxi was a big cab, allowing further conversations. Harry Webster soon spoke out and elucidated the values of the family. Those of us that were neuropathologists recollected that he even in his publications had used this term allegorically, for the description of the groups of outgrowing axons.

6. Another most memorable journey was to the 50<sup>th</sup> Annual Meeting of the Japanese Society of Neuropathology, organized by Kiyomitsu Oyanagi in Takamatsu 2009. This time I made a round trip, and I was accompanied by two persons. First, by my aunt, retired from general practice and at that time 87 years old but still very adventurous. Second, by my older son Giulio, student in theoretical physics and at that time in Tokyo as an awardee of the Japanese Ministry of Education, Culture, Sports, Science and Technology. He had asked his professor, Naoto Nagaosa, for an interview in his institute at the Hongo Campus, and we were kindly received in his office. He gave us an introduction to the new class of topological insulators, drawing a Möbius strip at the blackboard and also acknowledging the origin of Möbius from Leipzig. At the end of this interesting

but intellectually demanding recourse, my aunt drew a large old photograph out of her handbag. It was dated 1926 and showed a ceremony in Japan, where her uncle Walter Lwowski received a golden Sake-bowl engraved with the emblem of the Tenno, acknowledging of the construction of the first sheet mills at Kawasaki and at Yawata over a period of five years. Consecutively we made some further talk, and we expressed our thanks to Prof. Nagaosa for the long time that he had spent with this interview. We then made a sightseeing tour on the Hongo campus and were fortunate to be guided very competently by Masaya Oda, still fluent in German from his stay at the Max Planck Institute for Brain Research in Frankfurt long years ago. After further sightseeing in Tokyo, we took the Shinkansen to Takamatsu, a fast and comfortable ride.

7. The closer we came to Takamatsu, the brighter blue was the sky. On our arrival at the most scenic landscape, the splendid seaside location, and the very comfortable hotel at walking distance, it almost seemed to be a pity to spend the time in conference rooms. But the meeting then proved to be extremely well organized and interesting. Following the presidential lecture by Kiyomitsu Oyanagi and the plenary lectures by John Trojanowski and Dennis Dickson, presentations were scheduled in several different rooms, but all participants could enjoy a Bento (Japanese lunch) together. A major event was the memorial celebration party. At the end, after several addresses by dignitaries and notabilities, I dared to ask Kiyomitsu if I could say a few sentences in Japanese that I had prepared together with my son. My Japanese sentences were apparently understood, to judge by the applause. Finally, to our surprise and without having been prepared, my aunt was cited to the stage. She climbed up without hesitation and reported, translated by my son, some episodes of her life as well as the connections of her family with Japan, and she got even more applause. Upon returning back to Tokyo, accompanied by Akira Hori in the Shinkansen and following his explanations regarding the history of the landscapes and monuments passing by, we had another very nice farewell. Masaya Oda invited us for dinner in a top-class restaurant, together with his family. The cook prepared the meal on hot plates just in front of each guest, separately yet perfectly synchronized (Fig. 7).



**Fig. 7.** Invitation for dinner in a fine restaurant in Tokyo (from left: my son Giulio, my aunt Gisela Rohlmann, *RS*, Masaya Oda and his daughter.

## Retirement and Beyond

In 2010 at the age of 65, I did not feel like retiring, as it is usually required for civil servants in Germany. Therefore, I personally went to my employer, the SMWK (Saxonian Ministry for Science and Arts) in Dresden, and I asked for special permit to continue as head of the neuropathology department in Leipzig. The answer of the officer in charge was affirmative. Not so, however, the answer of the Dean of the University in Leipzig. Fortunately, I soon got an offer to work as a neuropathology consultant elsewhere in Leipzig, in the Institute of Pathology and Tumor Diagnostics at the municipal hospital St. Georg. The director there, Volker Wiechmann, as well as the chief of the associated pathology practice, Andreas Plötner, were known to me as previous participants of my slide seminars. I was sympathetically accepted as a member of the team, and I have always been invited for social gatherings such as the annual Christmas dinner party. For more than 10 years up to now I thus have continued to make diagnostic work for the neurosurgery and other departments as well as all routine brain cutting. In a rather comfortable way for several hours daily, usually in the afternoon except once a week at 7 a.m., a time that is scheduled for the tumor board. I enjoy instructing the younger colleagues at a multi-viewer microscope, and there is also the opportunity to give some lectures to students since St. Georg is a teaching hospital of the University. Furthermore, there

are some ongoing clinical research projects in collaboration with Max Holzer from the Paul-Flechsig-Institute for Brain Research and with other scientists. On occasion I am pleased to get visits by external colleagues and old friends, giving testimony that Leipzig has become an attractive location again (Fig. 8). The Institute of Pathology of the St. Georg Hospital, founded in 1913, is one example of the many historical and well restored buildings (Fig. 9).



**Fig. 8.** Kiyomitsu Oyanagi and RS in front of Dr. Faustus and Mephisto at the Auerbach's Keller restaurant in Leipzig.

At the University Clinics I am still participating in academic events and I am still a member in a graduation committee. Asked about my hobbies and proclivities, I can say that there is no boredom. Trying to stay up to date, I am reading two daily newspapers and I am browsing through the serial issues of about 10 journals including Science, JNEN, BIOspektrum, and Rotary Magazin. One particular field of interest is astronomy, and my collection of the pertinent literature has resulted in several presentations on galaxy evolution to a lay public. Another one is history, especially in relation to the origin of religions or ideologies. I am also fond of fine arts, though not personally active anymore in painting and in piano playing. Last not least I am enjoying fine

cuisine, being spoiled already at home by my Italian wife. My mobility is somewhat limited by a peripheral neuropathy that is associated with a protein well known to me. However, there is no change both in my general view of pathology as well as in relation to myself: a molecular detail may be important and have far-reaching implications, but it does not carry the weight of an integration of all macroscopic and microscopic aspects in correlation with the individual history. Altogether it is thus a pleasure to continue with my professional activities, comprising 50 years in neuropathology.

**CV (short):** to be found at my homepage <http://www.schober-info.com/>



**Fig. 9.** The Pathology staff at the St. Georg Hospital in Leipzig (upper row from right: Director Volker Wiechmann, RS, Chief Pathologist Andreas Plötner).