
Report of the 2008 ACS Traveling Fellow to Germany

by John F. Renz, MD, PhD, FACS

It was 1:27 am on Thursday, September 25, 2008, as my wife Geraldine C. Diaz, DO, and I settled into a familiar booth at our local International House of Pancakes. I had just completed the donor operation, back-table, and orthotopic liver transplant of a 10-month-old, 7 kg girl. My wife performed the anesthesia for this case and we were exhausted. In three hours, we had to have our two children, mother-in-law, and ourselves packed and ready for an international flight to Germany. We were about to embark on what would become a highlight of our academic careers, and we didn't even yet know it.

The American College of Surgeons' Traveling Fellowships are an extraordinary opportunity to interact with colleagues on a range of clinical and research interests while touring a foreign country. Sponsored by the ACS International Relations Committee, fellowships are currently offered in Japan, Germany, and Australia/New Zealand. My initial interest in the Germany Fellowship was purely academic, as reflected in the title of my presentation at the 2008 Clinical Congress, "Comparison of Extended-Donor Criteria Liver Allograft Utilization, Including Adult-to-Adult Living-Donor Liver Transplantation, Between Europe and North America." Hav-



Entrance to University Hospital Münster Surgery Clinic.

ing previously been to Germany for surgical conferences, I saw this fellowship as a chance for detailed study of two different organ allocation systems that would culminate in an academic report. To that end, I dutifully arranged for a whirlwind tour of every major university per-

forming liver transplantation in Germany, with one day allotted to each university/city pair. This fellowship promised to be a once-in-a-lifetime opportunity to personally meet many of the thought leaders of transplantation in Germany, but only upon completion of the journey would

I truly appreciate the essence of the fellowship.

Annual Congress of the German Society of Surgery

The Traveling Fellow is expected to attend the Annual Congress of the German Society of Surgery. This was the 125th meeting of the Deutsche Gesellschaft für Chirurgie that is organized as a weeklong event very similar to the ACS' Clinical Congress. The meeting was held the week of April 22, 2008, in Berlin. The unexpected illness of a family member limited me to attending only the meeting in Berlin with immediate return to the U.S.; the university tours were postponed to a later date.

In Berlin, I participated in a roundtable discussion of residency work-hour restrictions chaired by Prof. Ernst Klar, MD, chief of transplantation at University Hospital Rostock, and my host for the Fellowship, Prof. Norbert Senninger, MD, chairman of the department of surgery and chief of transplantation at University Hospital Münster. I am very thankful to both for their invitation and hospitality during my visit. At that discussion, I delivered a 20-minute presentation, Work Hour Limits: How We Do It at the University of Arizona. This presentation was followed two days later by a 30-minute lecture, Utilization of Expanded-Donor Criteria Liver Allografts, that I delivered at a session hosted by the president of the German Society of Surgery, Prof. Rainer Arbogast, MD. Afterward, I had an enjoyable discussion on extended-donor criteria liver allograft utiliza-



Traditional German lecture hall. The majority of lectures were given in this setting.



Left to right: Dr. Wolters, Dr. Renz, and Professor Senninger at Münster.

tion with Prof. Wolf Bechstein, MD, chief of transplantation at University Hospital Frankfurt. My schedule was booked by the meeting each day whereas evenings were spent visiting the Berlin Wall and Checkpoint

Charlie and touring the trendy Kurfürstendamm, a retail hub similar to New York's Madison Avenue. On the last evening, I attended a large gala with Professor Senninger, where I had the honor of meeting numer-



Professor Klempnauer, Dr. Diaz, Peter Renz, Dr. Renz, and Professor Piepenbrock at the entrance to the Rudolf Pichlmayr Center for Transplantation Surgery.

necessitated someone to assist us with our two sons, and I am very thankful my wonderful mother-in-law could join us.

Frankfurt

Our arrival at Frankfurt revealed a marvelous Sunday afternoon. Germany had been blessed with an Indian summer of temperatures in the high 70s and brilliant sunshine. The itinerary called for a three-hour drive via the autobahn to Münster; however, we elected to take scenic back roads with many stops along the Westfalia countryside. Almost seven hours later, we arrived at our hotel to prepare for our first visit. The selection of Münster as our initial visit was deliberate. Here we could spend time with Professor Senninger and review our travel plans as well as any additional suggestions. Münster is a medieval university city of roughly 280,000. The center of town is marked by the Dom St. Paul, a massive cathedral initially constructed in the 13th century and impeccably restored after World War II. The cathedral contains a functional astronomical clock that is more than 400 years old.

The university hospital is an inspiring facility mating traditional architecture with state-of-the-art technology (see photos on pages 43 and 44). Our guide for a tour of the hospital and laboratories was Heiner Wolters, MD, privatdozent and leader of Professor Senninger's transplant team (see photo, page 44). I was fortunate to meet Torge Mees, MD, and Prof. Hans-Ullrich Spiegel, MD, and tour their laboratories. Our

ous German colleagues from a variety of surgical specialties.

The 2008 Annual Congress of the German Society of Surgery was an outstanding educational event on par with the ACS Clinical Congress. Of particular note was the difference in vendor representation with respect to food and beverages that were plentiful at the European event. The contribution of my host, Professor Senninger, cannot be overemphasized. He was invaluable as a guide, counselor, mentor, critic, and friend. As I departed Berlin, I eagerly anticipated my return in September 2009 to complete my university tours.

September return to Germany

Assembled at the gate one year later, we were ready to go back to Germany. Geraldine, our two sons (Peter, age 4 years,

and John, age 18 months), and my mother-in-law Rogelia Diaz awaited our flight to Germany. I have chosen to travel with my family whenever possible, as they erratically see me at home.

For this trip, traveling with my wife was a unique professional opportunity, as she is board-certified in anesthesia and critical care. Her expertise as leader of our liver transplant anesthesia group at the University of Arizona was relayed in advance to each center we were scheduled to visit in Germany. Every center accepted our offer to perform combined surgery/anesthesia grand rounds on a variety of topics related to adult and pediatric liver transplantation. Working side-by-side with my wife, literally, in building a liver transplant program has required the help of an army of individuals. Our itinerary again

conversation focused on hepatic microvascular circulation following ischemia reperfusion injury. I also had the opportunity to meet Prof. Hartmut Schmidt, MD, medical director of liver transplantation at Münster and an international expert on Wilson's disease. We toured his laboratory and discussed the performance of combined heart-liver transplantation as well as the current organ shortage in Germany. During the hospital tour, I had the opportunity to review a patient in evaluation for combined heart-liver transplantation with the entire cardiac and hepatic transplant teams in attendance. Later in the day, my wife delivered grand rounds on anesthetic management of combined heart-liver transplantation and I delivered a lecture on extended-donor criteria hepatic allograft utilization.

The children and their grandmother returned from a visit to the Münster Zoo just as we arrived at the hotel. That evening, we enjoyed spirited conversation with the Münster transplant team on liver allocation in Germany as the guests of Professor Senninger at the Pinkus Mueller Brewery, an authentic German eatery. The Renz klan had enjoyed a wonderful first day, but we were already behind, as Hannover, the next day's visit, was more than 150 km away.

Hannover

Hannover was an important stop on my schedule—it is not only one of the largest abdominal organ transplant programs in Germany, with extensive experience in pediatric



Dr. Renz and Professor Nashan at the entrance of the University Hospital Hamburg Surgery Clinic.

and combined liver/thoracic-organ transplantation, it is also the institution of Rudolph Pichlmayr, MD, FACS(Hon), FRCSEng(Hon), a pioneer in hepatic surgery and mentor to many of Germany's current leaders in transplantation. The current chiefs of Hannover, Hamburg, Regensburg, Mainz, Halle, Leipzig, Kiel, and Berlin-Charité all were trained by Dr. Pichlmayr. Our arrival was late, hampered by a driving rain that had caused accidents and slowing on the autobahn. The chairman of surgery and chief of transplantation, Prof. Jürgen Klempnauer, MD, greeted us in his office and provided a tour of the state-of-the-art hospital and new scientific research facility dedicated to Professor Pichlmayr (see photo on page 45). The new research facility provides seamless integration of scientific, medical, and sur-

gical research interests. My wife met with Prof. Siegfried Piepenbrock, MD, and toured the intensive care units. Later, we combined grand rounds on simultaneous heart-liver transplantation and Geraldine and I presented a description of our program using allografts from human T-cell lymphotropic virus seropositive donors to more than 60 attendees from the departments of surgery and anesthesiology.

The day also provided a brief opportunity to view the Maschsee, a large artificial lake encircled by the sprawling Eilenriede Forest within Hannover. The evening ended with a discussion of Hannover's extensive experience of more than 40 combined liver-lung transplantations during dinner at the central train station.

Because my younger son was having difficulty adapting to the



Members of the Renz family with Bianca and Christoph Broelsch.

sor Björn Nashan, MD, PhD, chairman of the department of surgery and chief of transplantation (see photo on page 46), discussing partial-organ allografts, and received a tour of the adult and pediatric hospitals and a beautiful new research facility by Jorg-Matthias Pollack, MD, assistant professor of surgery and member of the transplant team. Dr. Pollack is an exceptional young faculty member who practices transplantation surgery in addition to heading a funded research laboratory while overseeing surgical research and medical student education. Meanwhile, Geraldine attended walk rounds in the surgical intensive care unit as a guest of Prof. Alwin E. Goetz, MD, PhD, chairman of the department of anesthesiology, and toured their research facilities.

With our responsibilities completed by noon, Geraldine and I were back at the hotel to enjoy a wonderful day with our children. Hamburg is a blend of architectural beauty and cultural diversity that reminds me very much of San Francisco, CA. We enjoyed the city skyline via a canal boat tour of the Binnenalster, one of two lakes within the city, and had a relaxing outdoor dinner along the Jungfernstieg, a central boulevard for local commerce. Premium shopping was the call for my wife and mother-in-law at the Hanse Viertel Galerie Passage, while my sons and I checked out the InterCity Express bullet trains at the Hamburg Hauptbahnhof as well as an awesome family-owned toy store adjacent to the station.

time change, we would spend nights traveling the autobahn to the next city, only to begin with an early morning grand rounds. Typically our talks and tours would end in the early afternoon and we would return to our hotel just as our two sons were waking up and preparing to play. Driving the autobahn late at night was exhilarating. It is true there are segments with no signed speed limits, but the majority of the autobahn has a posted speed limit that is strictly enforced. In addition, there are numerous automated speed sensors that photograph your license plate and later send

a citation, as I would discover weeks after our trip had concluded.

Hamburg

Our third stop was Hamburg. The day began with plentiful sunshine and warm temperatures providing ample opportunity to enjoy this magnificent city. My wife and I began the day at 6:30 am with grand rounds on split/reduced/living-donor liver transplantation. This itinerary was particularly relevant, as Hamburg enjoys preeminence in the field of reduced-organ and pediatric liver transplantation. I spent the morning with Profes-

Berlin

The following day was Re-Unification Day, a national German holiday, so there would be no university visits on this day. I assumed this holiday was comparable to our Fourth of July—I was wrong. In search of a parade, I inquired of our hotel concierge, who was bleak in his recommendations for activities in Hamburg. “Try Berlin” was his recommendation, as he noted, “If anything is going on, it will be there.” And so, there we went: another 300 km away at night.

By now, I was hankering for a good night’s rest, so we selected the Holiday Inn in the center of town. The next two days in Berlin did not disappoint. Re-Unification Day was celebrated at the foot of the Brandenburg Gate, with more than 100,000 Berliners enjoying concerts, outdoor activities, and delicious food. It was then that I realized the enormity of this city. Its beauty, character, and depth easily rival other European capitals. While in Berlin, we enjoyed the Tiergarten, Berlin’s equivalent of Central Park in New York; the Berlin Zoo; and the museums of Schloss Charlottenburg. Particularly interesting is the Kaiser Wilhelm Memorial Church that was devastated by World War II bombing but has been converted to a monument on the atrocities of war.

Reinvigorated by our stay in Berlin, it was now time to travel south to Bavaria to complete our visits at Munich and Regensburg. We divided the long trip into two days



Munich, the heart of Bavaria.

that permitted time to relax at the country farmhouse of one of my mentors, Prof. Christoph Broelsch, MD, PhD. I have had the pleasure of knowing Professor Broelsch since 1992, when I was asked by Prof. Jean Emond, MD, to be his guide during a faculty visit to the University of California at San Francisco. Since then, we have collaborated regularly on projects pertaining to living-donor and pediatric liver transplantation. Indeed, Professor Broelsch was my sponsor for this fellowship. It was certainly a highlight for my family to spend a day on his beautiful farm just outside Celle in Western Germany and enjoy an authentic German dinner including delicious homemade pumpkin soup and stone-oven baked sweetbread, prepared by Professor Broelsch’s wife, Bianka (see photo, page 47).

Just before our departure, an interesting event occurred that would fundamentally change our itinerary. I had asked Professor Broelsch if we could walk the countryside where I could bounce off him some research ideas I had about expanding the donor pool in the U.S. “Of course” was his reply, “let’s enjoy a cigar!” Before I could respond, my four-year old son replied: “I would like a cigar!” This was a code word between my son and I that Professor Broelsch did not recognize: whenever I have to go to some obligatory meeting or event where he cannot attend, I promise him that as soon as he is “old enough to smoke a cigar,” he can join me. Quick to accept the professor’s offer of a junior cigar, there we went to stroll the countryside, but, more importantly, I now had a permanent attaché for all my future meetings and visits.



Dr. Diaz at entrance to University Hospital Regensburg.

Munich

We arrived in Munich to begin the last segment of our journey. This was my first visit to the Bavarian capital that was just recovering from Oktoberfest. Brilliant sunshine and warm temperatures complemented this breathtaking city. Picturesque courtyards, fountains, gardens, and traditional Bavarian motifs abound (see photo, page 48). The city is energetic and open very late into the night. The costs for food and lodging are similar to such expenses in New York, Paris, or London, but there is a clean, efficient public transportation system that permits easy travel. I spent the morning at the University Hospital Munich, a quaternary referral center equivalent to any North American medical facility, as the guest of Prof. Karl-Walter Jauch, MD. The focus of our discussion was pediatric liver transplantation,

which is becoming less centralized in Germany. The discussion could have extended much longer, but Professor Jauch wisely encouraged me to enjoy the city; I did so with my family, participating in a walking tour of medieval cathedrals and museums within the Marienplatz, the heart of Old Town.

The next morning, the subject of pediatric liver transplantation was revisited in the format of combined anesthesia/surgery grand rounds, followed by several case discussions. We planned to stay longer; however, Professor Jauch, upon hearing that our next stop was Regensburg, advised us to be certain to appropriate sufficient time to explore the ancient city.

Regensburg

Driving through the German countryside during the light of day, we appreciated the transition from Munich to Regens-

burg. Regensburg hugs the Danube River and was largely untouched during World War II. Regensburg originated as a Celtic settlement in approximately 500 BC and retains the traditional city plan of a stone wall encircling an enormous central church, the Dom St. Peter, the home of Pope Benedict, as well a Stone Bridge crossing the Danube that has served the city for more than 800 years. The modern University Hospital complex (see photo, this page) is located atop a hill outside of town with magnificent country views. Our hosts for this visit were Stefan Farkas, MD, PhD, and Marcus Sherer, MD, PhD, associate professors of surgery and members of the transplant team headed by Prof. Hans J. Schlitt, MD, chairman of the department of surgery and chief of transplantation. My wife was hosted by Christoph Wiesenack, MD, from the department of anesthesiology.

We enjoyed a tour of the medical and research facilities as well as a spirited discussion on the management of advanced hepatocellular carcinoma with Prof. Edward Geissler, MD, chief of surgical research and an expert on the pharmacology of sirolimus. My wife engaged in an interesting debate with the chairman of anesthesiology, Prof. Bernhard Graf, MD, on the role of antifibrinolytics during liver transplantation. This discussion was followed by combined grand rounds on pediatric liver transplantation at the request of the chairs of surgery and anesthesiology.

Later that night, we attended a wonderful dinner hosted by

Marcus Scherer at Bischofshof, a traditional German beer garden that originated as an ecclesiastical academy in 1810 with a brewery dating to 1649. These gatherings had become the hallmark of our trip: new-found friends from the fields of anesthesiology and surgery enjoying a fantastic meal of local cuisine as we share stories of our personal and professional lives (see photo, this page).

Reflections on the fellowship

As we left Regensburg after midnight for the 300 km drive to Frankfurt to catch our early morning flight home, the essence of this once-in-a-lifetime experience was apparent. The many new faces I now have the privilege of calling friends and colleagues have left a lasting impression on my work, research, and personal life. Already opportunities for collaboration have emerged and will continue to expand as I prepare the scientific report of the fellowship for submission to the *Journal of the American College of Surgeons*. This remarkable opportunity to interact with colleagues who at times use very different techniques to address the same fundamental questions of clinical medicine and research is a highlight of my academic career.

As the ACS' 2008 Traveling Fellow to Germany, I visited six academic centers, lecturing on the topics of pediatric liver transplantation, split/living donor liver transplantation, combined liver-thoracic organ transplantation, and utilization of extended-donor criteria liver allografts. This journey encompassed more than 1,500 km of



Clockwise: Peter Renz, Dr. Renz, Dr. Farkas, Dr. Scherer, Martin Loss, Professor Graf, and Barbara Sinner enjoy dinner in Regensburg.

travel by land within Germany during a period of 11 days.

I am very thankful to the membership of the American College of Surgeons and the International Relations Committee for the privilege of being your Fellow. There are also many individuals who I would like to recognize: Foremost are Professor Senninger of the University Hospital Münster; Kate Early of the International Relations Committee of the ACS; and my sponsor, Professor Broelsch, for their council in all facets of planning and execution. I also would like to thank Profs. Jürgen Klempnauer, Björn Nashan, Karl-Walter Jauch, and Hans Schlitt, as well as their clinical and administrative staffs, for their hospitality during each of my university visits. I am indebted to Profs. Rainer Gruessner, John Hughes, and Khalid Khan of the University of Arizona

department of surgery for covering my clinical responsibilities during the fellowship as well as the University of Arizona department of anesthesiology for permitting my wife to attend with me. Lastly, I would like to thank my family for their endurance, love, and sacrifice.

Acknowledgment

I am particularly grateful to Camilla Regler for coordinating my visit and arranging my itinerary.

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