

From Adamovec to Dubrovnik: an Extended Adventure, 1971- 1992

By Charles H. Calisher

calisher@cybersafe.net



This being my last regular column, it is time to summarize my experiences in Croatia and in the former Yugoslavia.

I am a very fortunate person. From family to jobs, home location, health, and more, I simply have always been in the right place at the right time; I have never had to eat a green vegetable. I even had the good sense to choose my parents well.

Fortunate encounter 1: By 1970, I had been employed for 5 years at what was then named the Communicable Disease Center, now the US Centers for Disease Control and Prevention (CDC), in Atlanta, Georgia. A telephone call came from the Director of CDC, who asked whether I might be interested in serving as the Project Officer for a Special Foreign Currency Program, "Arboviruses in Yugoslavia;" I was thrilled at the thought. This program, under US Public Law 480, was enacted to try to reduce or even eliminate debts of various countries that owed the US huge amounts of money, mostly the result of war-time loans. These countries (Yugoslavia, India, Israel, Poland and others) had not only owed the US money, they needed food to feed their citizens and they needed other items, and that law was intended to help in these endeavors. The program did not hurt the US cause to try to drive another small wedge between the Soviet Union and its client states and associated countries.

Because it is essentially impossible to repay huge amounts of money (it would be all a poor country could do to repay the interest on such loans) and because it takes a rather large amount of money to administer such loans, the US Government obtained agreements from their debtors to allow it to forgive an equal amount of debt for every dollar equivalent those countries spent internally to rebuild themselves. In other words if, for example, Yugoslavia would spend US \$50 000 on virus research, the US would forgive US \$50 000 in debt and match that outlay with US \$50 000 of "new money." This was a win-win situation for both sides, although it was extremely difficult at the time for Yugoslavia to find the US \$50 000 to spend.

As a virologist, I never quite understood all this accounting sleight-of-hand or the politics of the situation, and I didn't care. All I wanted to do was visit Yugoslavia (or anywhere I had not been) and see what I could do to help.

Fortunate encounter 2: My tour of duty began in 1971. I was the Project Officer and my counterpart (Project Director) in what was then Yugoslavia was Jelka Vesenj-Hirjan, physician and Head of the Department of Virology, Public Health Institute of Croatia and Chair of the Department of Microbiology, School of Medicine, University of Zagreb. In the late 1930s, Jelka had joined the fight against fascism in Slovenia, the place of her birth, became a personal physician to Josip Broz (Marshall Tito; you likely have heard of him), and was awarded many military and civilian honors. After numerous harrowing experiences during World War II, and having come close to death from typhus and from enemy bullets, she embarked on a career in epidemiology and laboratory research in Slovenia and Croatia. Under considerably less than optimal conditions, she and her colleagues identified foci of tick-borne encephalitis (TBE), isolated the etiologic agent (Central European encephalitis virus) from humans (1,2) and from ticks, demonstrated that movement of sheep from northern to southern pastures in the fall allowed the dispersal of infected ticks (and virus) from north to south (3), was first to describe the presence of hemorrhagic fever with renal syndrome in Croatia (4), was first to isolate Bhanja virus in Yugoslavia, was first to describe human infections with that virus (*vide infra*), and was responsible for seminal studies of typhus and Q fever on Dalmatian islands (5,6). Naturally, Jelka took me to Stara Ves, where severe TBE was enzootic and explained to me the epidemiologic parameters of that disease in that place. I later had the honor of introducing Jelka to a Slovenian interested in TBE, Tatjana Avšič-Županc, now Professor at the Institute of Microbiology and Immunology in the Faculty of Medicine in Ljubljana.

Jelka's laboratory studies of bacterial, parasitic, and viral infections never obscured her love for clinical medicine and her love for people and for life itself. Having had so

many close calls during her early adventures, Jelka was determined to live life as though there might be no tomorrow. She was a great story teller, loved to talk, knew people everywhere we traveled, and was the first one up in the mornings and last to go to bed at night. I found out the hard way that she knew how to drink.

For official purposes, I was to visit Croatia each year for 2 weeks, usually in September or October. Her first effort to get me to understand the situation there was to take me to various places, each one somehow turning into a mini-adventure. I did this from 1971 to 1992. Occasionally accompanied by Dr Franjo Hirjan, Jelka's husband and Chief Justice of the Croatian Juvenile Court, we would drive here and there in Croatia to see ecologic habitats of certain viruses or simply to experience local customs and arts, including museums and concerts in Zagreb and Dubrovnik. One beautiful Sunday we drove north to visit Franjo's mother, who showed us her garden and who then prepared meat and 6 kinds of potato dishes. I knew then that these were my kind of people. From there we went to Koprivnica to meet the great Croatian naïve artist Ivan Generalić; this was a thrill for me.

Of course, Franjo had his own interests and work, so most of the time Jelka and I traveled without him. Once, we went to Kali on the island of Ugljan, near Zadar where, many years before, Jelka had saved the life of a child who had nearly drowned and where she had studied Q fever (7) years before that. As always wherever we went, we were treated like long lost relatives: kisses and hugs, too much food, and far too much (and yet not enough) *crno vino*. The local fishermen took me into the Adriatic very early one morning. When I awoke after a long nap, I found out that we were fishing illegally in Italian waters. Imagine my reaction to this news. I was a US citizen, an employee of the US Government, with no visa for Italy, and fishing illegally. I decided to drink some more wine and let the fishermen take care of the details.

Another time, after we had visited Cetinje, Budva, and Ulcinj and Skadar (Scutari) Lake, Jelka and I strolled toward the Albanian border. She stopped for a breath and I continued to walk, through a gate, down a short path, and to another gate, which I thought was the border with Albania. As it was, the border was between the two gates and I was in Albania, illegally of course. The border guard fired one warning bullet in my general direction and I left quickly. Jelka thought that was extremely funny. I cursed at the guard and he said, "Just go." We went onto Skadar Lake with

duck hunters, visited an old couple of the Turkish tradition, and I learned some of the terrible but fascinating history of various towns, bridges, churches, and schools. These are memories I shall carry with me to my grave, and perhaps beyond.

Fortunate encounter 3: It was on the Island of Brač that I became friends with a wonderful family of local people. Jelka knew them, somehow, as she always knew people no matter where we went. Because in northern Croatia and southern Slovenia the prevalence of antibody to TBE virus had been found to be low but the case-fatality rate high, and in southern Croatia the prevalence of antibody to this virus was high but the case-fatality rate was low, Jelka thought there might be differences between the TBE viruses in the two places and wanted to compare the viruses from each place. That meant collecting ticks, by removing them from sheep, and by dragging a white cloth over the ground.

Our aim was to collect ticks from sheep on Brač and to test them for viruses. Such a request was a serious one for the owners of the sheep because the sheep must be handled, perhaps by turning them on their backs, and they could be pregnant at that time (in spring, the best time to do such work). Country people do not like to have their sheep or daughters turned upside down by strangers, particularly when the sheep are near ready to deliver valuable (and delicious) lambs. After long discussions by a fire, with wonderful bread, fresh roasted lamb, fresh eggs, garlic, roasted potatoes, and home made *crno vino*, these generous, warm, and good humored (and large) people understood our desires and goals. That visit and subsequent visits with them are among the very most memorable days of my life.

We did not isolate TBE virus from the ticks we collected there but we did detect antibody to the virus in the sheep or the people there – not an astounding discovery. We did, however, isolate from *Haemaphysalis punctata* ticks Bhanja virus (family *Bunyaviridae*), which had been isolated previously only from *Haemaphysalis intermedia* ticks in India (8, 9). When the ticks had been collected, they were pooled by species (by Danica Tovornik, Institute of Public Health, Ljubljana) and the supernatant fluid from the pooled and macerated ticks were divided into two aliquots, one for Jelka's group to process for virus, one for me to process when I returned home. Volga Punda-Polić, by now a long time and dear friend, obtained her graduate degree studying Bhanja virus at the School of Medicine, University of Zagreb, but all I got from this vi-

rus was an infection (10). We published all this, of course, and more (11-13) and drank a little wine. We never published the illness I acquired after having been exposed to a particularly nasty *bura* while on Brač; because of its signs, symptoms, and severity we assumed it was caused by an influenzavirus. Fortunately I was treated, perhaps somewhat non-traditionally but successfully, by the great Josip Fališevac, at the hospital in Zagreb, in a childrens' ward. On other collecting trips to Brač, we stopped in Split, to see the palace, built about 300 C.E. for his own retirement by Dioclesius, emperor of the Roman Empire and spendthrift. It seems to me to be very easy to build great and glorious structures when others are doing the work and everyone else is paying for it.

Fortunate encounter 4: Meeting people. The idea of traveling to far-flung places is to meet "different" people, see different sights, eat different foods, and to get away from the relatively unvarying life at home. During my Yugoslavian travels, I was fortunate to meet hundreds of people, to hear hundreds of stories of parts of their lives, and to never have a bad day (unless I was hospitalized). Each of the lives of these people might have seemed to them to have an element of sameness but it was all new and different to me. Of course, after two weeks stay I was able to leave there each year! Nada Škrčić (an author of reference 9) was very kind to me. Nada had been a student of Telford Work (8), the person who had hired me to work at CDC and who was a friend of Jelka's, so we had something in common.

In the first days of my first trip to Croatia I had great difficulty in trying to understand the language. I eventually solved that problem by ignoring everything said in Croatian; I probably should have learned the language but I am lazy and not good with languages. Once, on a Sunday, Nada took me to her apartment near the Zagreb football stadium, where Dinamo Zagreb was playing Dinamo Moscow (as I recall). I had fallen asleep on Nada's sofa but awoke suddenly, only to see some teak elephants walking across a table. I pointed this out and Nada said, "Earthquake! Let's get out of here," and we ran into the street. I only thought Dinamo Zagreb had scored a goal.

On Brač, the veterinarian at Supetar was Zlatan Rendić. A jolly man, Zlatan knew everyone on the island, as well as everyone's animals. His was an important job in such a rural area. Zlatan was the nephew of the marvelous and widely recognized sculptor Ivan Rendić (<http://www.bracinfo.com/supetar/>).

I seem to have an affinity for Croatian sculpture and Croatian sculptors. While a graduate student at the University of Notre Dame in Indiana, I made acquaintances with a small, quiet, rather odd man who wore a beret. There were not many of those on campus. I told him I was a graduate student and invited him to a basketball game; I was, even then, vertically-challenged but, nevertheless, I played on a team of graduate students. We introduced ourselves and he told us his name was Ivan Meštrović. Ivan was our only fan and he came to all our games. His was a sad but heroic history (http://en.wikipedia.org/wiki/Ivan_Me%C5%A1trovi%C4%87).

For our honeymoon, my wife and I went to Croatia because I had committed to be there at that time and because I wanted to introduce my wife to my friends in Croatia and I wanted her to see the land and to meet its people. One of the daughters in the family on Brač, the people who had been so helpful to Jelka and me in our efforts to search for TBE virus there, had spent a year with me and my children in Colorado when she was 14. Her father, likely questioning my motives for wanting to take his child so very far away, had asked me what I would do if she misbehaved. I told him I would kick her ass. That seemed good enough for him and for his very large sons. I loved those people.

I was already in Zagreb when my bride arrived and, after a day or two we went to Dubrovnik, then to Jelka's house on Mljet (counting Jelka, there were three on our honeymoon) then to Split and Brač. Of all the many places in the world, of all the many sites I have seen, Dubrovnik ranks #1, by a wide margin (<http://en.wikipedia.org/wiki/Dubrovnik>). I need not tell you, dear Croatian reader, about this remarkable historical treasure; you already know. Jelka managed to connect with an old friend of hers, the widow of a former war-time Mayor of Dubrovnik whose heroic actions and stubbornness saved many Jews and others from dreadful fates at the hands of the Nazis. We stayed the night with this sophisticated and charming lady and heard many captivating stories.

When Jelka died, 21 February 1992, the Yugoslavian Government decided to transfer the administration of this Public Law 480 program to Serbia and I began working with Ana Gligić of the Institute of Immunobiology and Virology in Belgrade. The work was interesting and important, as far as I was concerned, I had the opportunity to experience new places and new people, and we were able to publish some papers, but my heart was no longer in it. After a year

or so, I resigned from this program and, at the same time, resigned from CDC, which was simply a coincidence.

I do not know how many people I met while I was in Croatia: all those listed in the references (*vide infra*) to the work we did there; all those mentioned above; Tatjana Jeren and Alemka Markotić; Ana and Matko Marušić of this journal; Tonči, Nina, Darka and all the Ostoja-Šimunović family; Zoran Miščević; the unknown and anonymous person who paid for my meal one night in a restaurant near Split; people whose names I have forgotten; people whose names I never knew; and many, many other decent and hospitable souls.

Even so, the long and periodically depressing history of Croatia, of Yugoslavia, of southern Europe and of Europe itself hangs heavy over all this. I do not know who of the charming people I have met were "good" people and who were not. The bottom line is that they were good to me, which is all anyone can ask. Clearly, we all must move beyond (but not forgive or forget) the anti-democratic actions of some and stay constantly aware of the possibility of the resurrection of such base and disgusting intents. As the previous administration in my country has shown, these cancers can occur anywhere and must be excised, by vote of the populace. Nonetheless, as our own Thomas Jefferson said, "The tree of liberty must be refreshed from time to time with the blood of patriots and tyrants. It is its natural manure."

I am deeply indebted to all who were so kind and thoughtful to me, especially Drs Matko and Ana Marušić, who asked me to put on paper my diverse and controversial thoughts. *Nema problema.*

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