

## NEWS

### **25<sup>th</sup> Anniversary of Laboratory of Cerebrovascular Diagnostics, University Department of Neurology, Sestre milosrdnice University Hospital, Zagreb, Croatia**

The Laboratory of Cerebrovascular Diagnosis, University Department of Neurology, Sestre milosrdnice University Hospital, Zagreb, was founded in 1976 by Professor Višnja Hudolin as the first such center in Croatia and one of the first in Europe. Professor Vida Demarin, M.D., Ph.D., a pioneer in the field of cerebrovascular diagnosis, has created a very powerful research center. Prof. Demarin acted as progenitor of the concept of noninvasive ultrasound diagnostics of cerebrovascular diseases. This concept has opened the possibility to see and understand something that was completely out of reach before. A window into cerebral circulation has thus opened, and the prevention of stroke by carotid endarterectomy has been made possible. The University Department of Neurology at the Sestre milosrdnice University Hospital, and its Laboratory of Cerebrovascular Diagnostics have become the Reference Center for Neurovascular Disorders of the Ministry of Health of the Republic of Croatia.

Today, with 17 courses on ultrasound diagnostics behind us, the Laboratory can certainly be with good reason considered the 'nursery of ultrasonographers'. Many of the experts in the field have made their first steps in this very Laboratory.

The Laboratory is also known and recognized for numerous scientific papers published in Croatia and abroad. In the past 25 years, more than 300 papers and 7 books were published, and 27 M.S. and Ph.D. degrees were acquired within the scope of a number of projects under the patronage of the Croatian Ministry of Science and Technology. The eighth book entitled 'Atlas of Ultrasound Diagnostics of Cerebrovascular Diseases' has just been about to appear. It is especially worthy mentioning that the last book by Prof. Demarin, entitled 'Stroke – Guidebook for Patients and Their Families' has been written in a way comprehensible to people without any medi-

cal education, laymen, patients and their family members.

During her longstanding and fruitful work time, Prof. Demarin has founded a number of societies, i.e. Croatian Society of Ultrasound in Medicine and Biology of the Croatian Medical Association, then Croatian Society of Ultrasound in Neurology, Croatian Society for Stroke Prevention, Society for Maintaining and Improving Brain Health, and Croatian Society for Neurovascular Disorders of the Croatian Medical Association.

A great number of public actions organized by the Laboratory have made it very popular in the public and have taught the people how to take much more positive and active attitude towards themselves and their health. The University Department of Neurology, Sestre milosrdnice University Hospital, is often mentioned as a synonym for the prevention of stroke.

The celebration of the 25<sup>th</sup> anniversary took place in the main lecture room of the University Department of Neurology, Sestre milosrdnice University Hospital. Many dear friends, colleagues and collaborators were invited and attended the ceremony. At the beginning, Prof. Demarin, head of the University Department of Neurology and of the Laboratory of Cerebrovascular Diagnostics, expressed her great satisfaction and appreciation to all those present at the ceremony. After these words of welcome, she continued by presenting the work and achievements of the Laboratory, from the very beginning, which was accompanied by warm congratulations. Professor Zvonko Kusić, M.D., Ph.D., head of the Sestre milosrdnice University Hospital, member of the Croatian Academy of Sciences and Arts, delivered a nice speech in which he pointed out how proud he was for the Laboratory being the leading laboratory for cerebrovascular diseases in Croatia and the main center for education and research in the field of neurovascular disorders, also well known beyond the borders of Croatia. Professor Ivan Drinković, M.D., Ph.D., chairman of the Croatian Society of Ultrasound in Medicine and Biology, and Professor Tomislav Šoša, M.D., Ph.D., chairman of the Croatian Society of Vascular Surgery, were the guests of honor. Prof. Drinković, on behalf

of the Croatian Society of Ultrasound in Medicine and Biology, presented Prof. Demarin with the acknowledgment for her personal achievements in the field and for the successful work of the Laboratory.

The celebration ceremony proceeded in a very warm, friendly and festive way, with good wishes for the future fruitful and productive work of the Laboratory, the Department, and their staff members.

*Marina Roje-Bedeković*

### **12<sup>th</sup> Ljudevit Jurak International Symposium on Comparative Pathology, Zagreb, Croatia, June 1-2, 2001**

*<http://salata.mef.hr/Jurak/symposium.htm>*

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The 12<sup>th</sup> Ljudevit Jurak International Symposium on Comparative Pathology was held in Zagreb, Croatia, June 1-2, 2001, under the auspices of the European Society of Pathology and Academy of Medical Sciences of Croatia. The Symposium was organized by the Department of Pathology, Sestre milosrdnice University Hospital, Zagreb, Croatia (President: Professor M. Belicza), Institute of Pathology, Leopold Franzens University of Innsbruck, Austria (Vice-president: Professor G. Mikuz), and Department of General Pathology, School of Veterinary Medicine, University of Zagreb, Zagreb, Croatia (Vice-president: Professor Ž. Grabarević). During the opening ceremony, Prof. Mikuz reported on Prof. Jurak's stay in Innsbruck at the beginning of the 20<sup>th</sup> century.

After the opening ceremony, the Ljudevit Jurak Award ceremony for contribution to the advancement in comparative pathology took place. The awards were presented by Professor M. Štulhofer, Vice-president of the Academy of Medical Sciences of Croatia, to Professors M. Reinacher, Giessen, Germany, and Ž. Grabarević, Zagreb, Croatia.

The main topic of the Symposium was Gastrointestinal Pathology. Memorial lectures on the spectrum of neuroendocrine tumor pathology in the gastrointestinal tract and on the role of abnormal protein in alcoholic and non-alcoholic steatohepatitis were presented by Prof. G. Klöppel, Kiel, Germany (past president of the European Society of Pathology) and Prof. H. Denk, Graz, Austria. Other invited speakers were M. Dominis, S. Kapetanović and N. Pećina-Šlaus from Zagreb, Croatia, who presented lectures on *Helicobacter pylori*, molecular genetics of co-

lon carcinoma, and genetic instabilities of the E-cadherin gene renal cell carcinoma. Professors M. Reinacher, Giessen, Germany, and E. F. Del Piero, Pennsylvania, USA, veterinary pathologists, delivered lectures on FeLV-associated enteritis and intestinal viral diseases of production and companion animals. Free papers were mainly presented as posters. The authors from Latvia, Romania, Spain, Italy, Macedonia, Bosnia and Herzegovina, Slovenia, and Croatia presented recent data on the diagnosis, protocols, and pathohistologic and immunohistochemical findings in different human and animal diseases.

In the Herman Jurak Round Table on Rheumatologic Diseases, an interesting invited lecture on inflammatory bowel diseases in the course of seronegative spondylarthritides was presented by Prof. W.G. Fassbender from Germany.

During the Symposium, two slide seminars were held. The Slide Seminar on Gastrointestinal Cytopathology was organized by Dr. A. Pogačnik, Ljubljana, Slovenia. The Slide Seminar on Comparative Pathology of Human and Animal Tumors was organized by Prof. G. Mikuz from Innsbruck, Austria. Cases were presented by Professors G. Mikuz, M. Reinacher, Del Piero, and B. Krušlin.

At the end of the Symposium, poster discussion and poster presentation award session were held. Poster Presentation Award was given to F.J. Salguero, A. Nunez, C. Sanchez-Cordon and J.C. Gomez-Villamandoz, Cordoba – Madrid, Spain.

The next Symposium will be held on June 7-8, 2002, with the main topic of Breast Pathology. Invited speakers will be Professors G. Bussolati and V. Eusebi.

All data on the Symposium can be found at our web site (<http://salata.mef.hr/Jurak/symposium.htm>).

*Božo Krušlin*

### **Healthy lifestyle and prevention of stroke postgraduate course organizers inter-university center Dubrovnik, Academy of Medical Sciences of Croatia, and Croatian Stroke Society**

*Dubrovnik, Croatia, June 4-8, 2001*

This year's Healthy Lifestyle and Prevention of Stroke Postgraduate Course was traditionally held in Dubrovnik, on June 4-8, 2001. Since 1990, the Course has been organized as part of the Dubrovnik Inter-University Center Course program, with the exception of the war years, when it took place in Zagreb and Brijuni, whereas in 2000

it was held in Medulin due to the war in the Kosovo area. Thanks to the persistence and efforts of the organizers, the continuity of the Course has thus been ensured.

This year again, the Academy of Medical Sciences of Croatia and Croatian Stroke Society were co-organizers of the Course.

Directors of this international postgraduate course are: Professor Vida Demarin, University of Zagreb; Professor Roman Haberl, University of Munich; Professor Kurt Niederkorn, University of Graz; and Assist. Professor Tanja Rundek, Columbia University, New York, USA.

The first Course was held in 1990, as a gathering of a group of enthusiasts. Since then, it was held every year at the beginning of June. It has grown into a renowned reunion of the worldwide experts in stroke.

The most prominent feature of this Course is a relaxed atmosphere, which enables the presentation, discussion and exchange of experiences and new achievements in the fields of epidemiology, prevention, diagnosis and therapy of stroke, transfer of knowledge between renowned experts and young doctors, and comparison of data on stroke from various countries.

More than forty participants from different centers in Croatia: Zagreb, Osijek, Karlovac, Koprivnica, Slavonski Brod, Vinkovci, Dubrovnik, Split and Labin, as well as from the United States, Germany, Bosnia and Herzegovina, and Slovenia attended this year's Course.

The Course was opened on Monday by Professor Vida Demarin, Course director, who briefly described the work of the Croatian Society for Stroke Prevention, chaired by herself during the last year. Prof. Demarin, head of the University Department of Neurology, Sestre milosrdnice University Hospital, presented the activities of physicians from the Department over the last year.

After the opening ceremony, the working part of the Course began with a lecture of Marina Roje-Bedeković entitled "A chronicle of Dubrovnik medicine", in which she presented the development and achievements of Dubrovnik medicine through centuries, and their importance for the Croatian and world science.

Then, Prof. Demarin presented "Guidelines for stroke therapy", based on the longstanding work and experience in stroke collected by a large team of experts of various specialties. Prof. Demarin and Assist. Prof. Zlatko Trkanjec showed results obtained in the project of the Croatian Society for Stroke Prevention, presenting epidemiological data on stroke from all parts of Croatia.

Prof. Roman Haberl from Munich, Germany, elaborated sex differences in stroke, and Dr. Johannes Schenkel,

also from Munich, Germany, presented an update on the evidence and economy in secondary prevention of stroke. With this lecture, the first day of the Course was closed.

The second day of the Course, Tuesday, started with a lecture delivered by Assist. Prof. Tanja Rundek from Columbia University, New York, in which she presented data from the GAIN Americas Trial about the rise and fall of neuroprotection in acute stroke. Then, Head Dr. Vesna Vargek-Solter delivered a lecture about the principles of acute stroke treatment in intensive care unit. Assist. Prof. Mark Malakoff from Houston, Texas, elaborated recent advances in neurocritical care of stroke patients, and Dr. S. Schwab from Heidelberg, Germany, pointed to the importance and principles of intensive care of acute stroke patients. The second day of the Course ended with a lecture by Dr. Angela Schreiber from Munich, Germany, about decompressive hemicraniectomy in patients with malignant middle cerebral artery infarction.

The working program of the Course continued on Thursday with a lecture by Prof. Demarin and Dr. Vlasta Vuković about current applications of neurosonology, possibilities and importance of neurosonology in the prevention, diagnosis and therapy of stroke, and development of neurosonology. The next lecture by Dr. Marjan Zaletel from Ljubljana, Slovenia, was about dyslipoproteinemia, its connection with atherosclerosis and hypoechoic plaques. Dr. Petra Margetić elaborated preliminary experiences in diagnosing cerebrovascular disease with magnetic resonance. The next lecture was delivered by Assist. Prof. Mark Malakoff on thrombolytic therapies for stroke, experiences and results from Houston, Texas. Dr. Veronica Maasberg from Munich, Germany, reported on a very interesting case and experiences with thrombolysis in Germany.

The last day of the Course proceeded in a working atmosphere too, with lectures by Dr. Martin Wimmer from Munich, Germany, on *Chlamydia pneumoniae* and neurologic disorders; Assist. Prof. Dragutin Kadojić on secular mortality trends of cerebrovascular disease in Croatia during the 1957-1997 period; and Dr. Nada Runjić on the role of cerebrovascular disease in the etiology of tinnitus. The lecture presented by Head Dr. Nikola Barić was about the role of internal carotid artery bifurcation in the formation of helical blood flow in daughter arteries. At the end of the professional program of the Course, Assist. Prof. Zlatko Trkanjec presented data obtained by use of a stroke questionnaire distributed on the first day of the Course and filled out by all Course participants. The ques-

tionnaire provided an opportunity to collect some epidemiologic data on stroke from various countries.

After closing remarks delivered by Course director, Prof. Vida Demarin, certificates of attendance were presented to all participants, and the Healthy Lifestyle and Prevention of Stroke Postgraduate Course was finished. All lectures and presentations will be published in the journal *Acta clinica Croatica*.

Like before, on the last day of the Course, the Inter-University Center Dubrovnik organized a farewell party for all participants of this and all other courses, which was another opportunity for nice companionship and exchange of experience. Prof. Vida Demarin expressed thanks to the participants of all courses that had taken place at the Inter-University Center Dubrovnik that week for coming and taking active participation, hoping for and looking forward to the next gathering in Dubrovnik next year.

Besides a very rich working part of the Course, an attractive social and cultural program was organized for

the participants, providing an opportunity for gathering in a very comfortable and friendly way. As a welcome party, a short trip by boat from the City port to a nice restaurant near Dubrovnik was organized. The participants also enjoyed in the folk dance performance by Lindo in the old Lazarets and in the concert that took place in the Principal Palace. A traditional one-day excursion to the island of Lopud was organized as well.

The course was designed as a gathering of experts in the field of stroke, aiming at the exchange of the present knowledge and experience, and at generating new ideas, as well as at providing an opportunity for making new friendships with the people of the same interests but from different parts of the world. Considering a great number of participants gathered here every year, many of them keeping coming for years, the Course has achieved its goal.

*Marina Bedeković-Roje*



### **Inauguration of the Teletherapy Division and Brachytherapy Center at the Sestre milosrdnice University Hospital**

On Monday, June 18, 2001, Professor Ana Stavljenić-Rukavina, M.D., Ph.D., minister of health, inaugurated the Teletherapy Division and Brachytherapy Center at the

Department of Oncology and Nuclear Medicine, Sestre milosrdnice University Hospital in Zagreb.

The 155<sup>th</sup> anniversary of the Sestre milosrdnice University Hospital is celebrated this year. During its long and rich history, the Hospital widely known as Vinogradska Hospital, has taken the leading position in many fields of professional and scientific activities in the region. One of these fields is oncology, so that in 1958 the first cobalt unit in former Yugoslavia was mounted here. Eminent members of the Hospital staff, under the leadership of Professor Ivo Padovan, M.D., Ph.D., founded in Zagreb the Croatian League Against Cancer in 1966 and Central Institute for Tumors and Allied Diseases (now Hospital for Tumors) in 1968. One of the pioneers of radiotherapy in Croatia was Professor Körbler. Professor Spaventi, who had the leading role in the development of oncology in this hospital, founded Department of Oncology and Nuclear Medicine in 1962. In 1999, the Department became the Ministry of Health Reference Center for Thyroid Diseases, also including radioiodine therapy of thyroid tumors.

Along with surgery and chemotherapy, radiotherapy is most commonly used in the treatment of malignant diseases. Each year, over 20,000 new patients with malignant diseases are being diagnosed in Croatia. About 60% of all malignant diseases are treated with radiotherapy. Radiotherapy is a complex interdisciplinary procedure in

which medical physicists and medical radiology technicians are involved along with physicians. A number of conditions have to be met for the use of radiotherapy to be appropriate and successful. They primarily include appropriate premises, equipment and staff.

In the newly opened Brachytherapy Center at the Sestre milosrdnice University Hospital, highly proficient and most up-to-date brachytherapy in Croatia is being used: HDR brachytherapy remote afterloading unit (GammaMed 12i) with a Phillips x-ray unit for treatment planning, and other necessary equipment. This represents continuation of traditional brachytherapy treatment that has been performed at the Department for a long period time.

Brachytherapy is a radiotherapeutic method in which the radiation source is not placed outside the human body but is implanted within the tumor or adjacent to it. The source is mobile, of less than 1 mm in size, inserted in a tube and kept in a lead safe. The source has high radioactivity and, owing to HDR, one application takes for not more than some 10 minutes and is repeated in a certain period of time (every week). When in function, the source is computer manipulated from the safe, the patient is video-controlled and physically isolated in a separate room, while the staff (physician, medical physicist, nurse) are not exposed to radiation. The method is used independently or in combination with teletherapy in the treatment of solid and easily accessible tumors. Remote HDR afterloading brachytherapy is mostly used in the management of gynecologic tumors (cervix and corpus uteri), tumors of the head and neck, prostate, esophagus, bronchial tumors, soft tissue sarcoma, and in non-malignant diseases such as peripheral arterial stenosis following cardiovascular diseases. Since the source is mobile, it is possible to reach optimal dose distribution in tumors of very uneven surfaces, and thus to deliver a high dose to the tumor itself and not to the surrounding tissue.

In the newly constructed Teletherapy Division, a new, state-of-the-art cobalt unit has been mounted (Co-60 Cirrus CIS Bio International and Simview 3000 Siemens simulator). The radiation source is highly radioactive and of very small dimensions. It is of a cylindrical shape, 2 cm in diameter, and is positioned in a protection cover. In a majority of such units, the distance between the source and the skin is 80 cm. The advantage of cobalt unit is its reliability, simple dosimetry, and lower price of the unit itself and lower maintenance expenses. The simulator operates like a diascopic x-ray unit simulating therapeutic beam. This is the way to verify the aimed radiation volume. Simulation is carried out in the same position and

under the same conditions under which radiation therapy will be performed. Both the cobalt unit and the simulator are operated from the adjacent room, i.e. from the operation counter.

In collaboration with the International Atomic Energy Agency (IAEA), besides these two main facilities, a whole range of auxiliary instruments have been purchased in order to optimize the radiation procedure (blocks, compensators, wedges, etc.). Significant improvement has been made by the introduction of modern planning computer system Theraplan Plus-1000, which allows for direct input of CT slices and 3D beam visualization and radiation volume, which is the only one in the country. In this newly built and equipped Teletherapy Division, it is possible to perform radiotherapy in a large number of patients under considerably better conditions than before. The building has been constructed according to modern requirements of radiation protection. Now, high-quality radiotherapy by use of the cobalt unit has been made possible at the Sestre milosrdnice University Hospital.

In addition to the premises and equipment, special attention has been paid to staff education. Physicians and physicists have been awarded by IAEA and attended a total of 34 fellowships and training courses at most outstanding radiotherapy centers in the world. Also, several scientific and research projects were carried out or still are in progress, in which the Department of Oncology and Nuclear Medicine has been involved as a co-ordinating or IAEA collaborating institution.

*Zvonko Kusić*

## **22<sup>nd</sup> International Congress of Chemotherapy Amsterdam, Netherlands, June 30 – July 3, 1001**

The 22<sup>nd</sup> International Congress of Chemotherapy was held at the beginning of July in the International Exhibition and Congress Centre RAI in Amsterdam, the Netherlands. The RAI Congress Centre and the city of Amsterdam represented a perfect venue for this Congress. More than 60 member societies of the International Society of Chemotherapy from all over the world came to the enticing city of Amsterdam in the heart of Europe. The Organizing Committee of the Congress succeeded in preparing what appeared to be an excellent program in many aspects. Some of the numerous issues discussed at the Congress were as follows: *Helicobacter pylori* infections; Difficult to treat – meningitis and sepsis; Development of new antibiotics; Pathogenesis of

infection; New vaccines in clinical practice; Management of fungal infections; Strategies in the hospital to prevent and combat resistance, New technology in microbiology; Treatment of chronic hepatitis, Food- and water-borne diseases; Probiotics; etc.

Many symposia that were incorporated into the program covered the following topics: Linezolid – an important new option for treating gram-positive infections; Macrolides – new directions for the new millennium; Febrile neutropenia; Optimizing anti-influenza treatment; The role of ketolides in the battle against antibiotic-resistant *Streptococcus pneumoniae*; Global surveillance of antimicrobial resistance among respiratory

pathogens; Fighting bacterial resistance; Treatment of community-acquired pneumonia; De-escalation therapy; etc.

Participants had numerous opportunities to meet friends and colleagues, and to make contacts. They could easily engage themselves in discussions. All participants acquired valuable scientific experience but also paid an enjoyable visit to Amsterdam. Amsterdam is a highly tolerant, vibrant and cosmopolitan city. We all felt home in this city of culture.

Durban, South Africa, has been chosen as the host of the next Congress to be held in 2003.

*Ines Benčić*