

*special communication*

## 60 years of the Slovenian Association of Radiology 1950-2010

Dušan Pavčnik

*Dotter Interventional Institute, Oregon Health Sciences University, Portland, U.S.A.*

The year 2010 is the 60<sup>th</sup> birthday as well as the diamond jubilee of the Slovenian Association of Radiology (SAR). Only a few SAR members remember the birth and early years of our association of radiology. My intention is to bring these days back. My memory is neither complete nor perfect, is also quite subjective, some time biased. To commemorate the history of SAR, we need to look at the developments of radiology before our association was created.

Radiology was born on November 8, 1895 when Wilhelm Conrad Röntgen made his significant contribution to medical science. On that day, he observed a different kind of ray was mixed with the cathode rays and was amazed to find that when he held materials between the cathode-ray tube and the fluorescent screen he could see a shadow of the bones and soft tissue in his hand on the barium platinocyanide screen. He temporarily termed the new rays as X rays.<sup>1</sup> Four years later, in the final year of the nineteenth century, the first X-ray machine was purchased by primarius Dr. Edo Šlajmer

for the general hospital in Ljubljana.<sup>2</sup> Drs. Alojzij Kunst, Josip Hebein, Mila Kovačeva, Ciril Cirman, Serafin Vakselj and Rudolf del Cott laid the basis for diagnostic radiology in Slovenia.<sup>2</sup> Primarius Dr. Alojzij Kunst, the first Slovenian radiologist, was driving force to make radiology popular among colleagues. In his lectures at the Slovenian Medical Association (Slovensko zdravniško društvo) meetings he emphasized the importance of delivering the exact diagnosis to clinicians, thereby allowing them to select proper treatment. He also served as president of the Slovenian Medical Association from 1938-1940. The first meeting of a new X-ray Society in old Yugoslavia was held in Split in 1930 and then the 1<sup>st</sup> congress of Yugoslavian radiologists took place in Belgrade in 1935.<sup>2</sup> Primarius Kunst, primarius del Cott and Prof. Hebein were active members of this society.

After ending the Medical Chamber of Slovenia in 1946, different professional sections of the Slovenian Medical Association became a forum for physicians to discuss professional issues and other day to day problems. The Slovenian Association of Radiology (SAR) was founded on August 8th in 1950, as Section of Radiology of the Slovenian Medical Association (Radiološka sekcija Slovenskega zdravniškega društva) on the initiative of the Slovenian Medical Association and professor Dr. Josip Hebein,

Correspondence to: Dušan Pavčnik, M.D., Ph.D., Dotter Interventional Institute, Oregon Health Sciences University, 630 SW Gaines St., L-342, Portland, OR 97239-309, U.S.A. Phone: +1 503 494 3669; Fax: +1 503 494 4258; E-mail: pavcnikd@ohsu.edu

*Key words: radiology; interventional radiology; history; ultrasound; CT; MRI*



Figure 1. Prof. Dr. Josip Hebain, 1950-1956.



Figure 4. Prof. Dr. Ludvik Tabor, 1957-1958; 1964-1966; 1968-1969; 1975-1982.



Figure 7. Section of Radiology of the Slovenian Medical Association.



Figure 2. Section of Radiology of the Slovenian Medical Association.



Figure 8. Prim. Dr. Uroš Vizjak, 1966-1968.



Figure 3. Prof. Dr. Mira Vurnik Zumer, 1956-1957; 1962-1964.



Figure 5. Prof. Dr. Stanko Hernja, 1959-1960.



Figure 6. Section of Radiology and Nuclear Medicine of the Slovenian Medical Association.



Figure 9. Prim. Dr. Vekoslav Janežič, 1970-1971.

who was elected its first president (Figures 1, 2). In 1956, the SAR and Prof. Hebein organized the forth congress of Yugoslavian radiologists in Ljubljana. Overall, 7 invited faculty from Europe, 140 radiologists and for the first time 15 companies participated at the meeting.<sup>2</sup> After the meeting, the second president of the SAR, Prof. Dr. Mira Vurnik Žumer took her turn (Figure 3). Prof. Dr. Ludvik Tabor (Figure 4) was elected the third and Prof. Dr. Stanko Hernja the forth president of the SAR (Figure 5).<sup>3-6</sup>

Although radiology had been already separated as a discipline between diagnostic and therapeutic aspects of radiology at that time, some radiotherapists were members of the SAR.<sup>2,7</sup> In the mid fifties, investigation and the clinical research with radioisotopes began in Slovenia. Iodine 131 was used for thyroid diagnosis first by Dr. Jože Satler and later by Dr. Bojan Varl. In 1955, Dr. Leo Šavnik and then in 1957, Dr. Stojan Plesničar injected patients with radiopharmaceuticals for tumor radiotherapy at the Institute of Oncology in Ljubljana.<sup>7,8</sup> In the late fifties or early sixties nuclear medicine colleagues joined the SAR and its name changed subsequently into the Section of Radiology and Nuclear Medicine of the Slovenian Medical Association (Sekcija za radiologijo in nuklearno medicino Slovenskega zdravniškega društva) (Figure 6). By 1974, five more nuclear medicine departments appeared in hospitals in Slovenj Gradec, Celje, Maribor, Sempeter pri Novi Gorici and Ankaran that resulted in creation of an independent Section of Nuclear Medicine (Sekcija za nuklearno medicino).<sup>8,9</sup> Prof. Bojan Varl served as their first president.<sup>10</sup> After that event the SAR was renamed back to the Section of Radiology (Figure 7).

Since the beginning, SAR has served as a forum for radiologists to collectively voice common concerns and professional interests. Its purpose is to promote and develop the highest standards of radiology and

to exchange professional experiences and scientific information in all fields of radiology and related sciences through patient care, education and research. SAR is governed by the President, the Executive Board and the General Assembly. The Slovenian Association of Radiology is the official educational and scientific association of Slovenian radiologists.

One of the aims of the SAR is to promote close cooperation among radiologists with other international radiological societies and, especially in neighboring countries, to promote common educational and research programs (for example Alpe Adria Radiological Group). Since the first meeting in Dobrna (Slovenia) in 1968, organized by primarius Dr. Uroš Vizjak (Figure 8), radiologists from university radiological departments of Trieste, Padua, Verona, Graz, Ljubljana and Zagreb have been meeting in one of the neighboring countries to share their scientific experiences annually.<sup>11,12</sup> Between the 1958 and 1961 the SAR and the Croatian Section of Radiology organized successful intersectional meetings in Pula, Maribor and Split. Primarius Dr. Mila Kovačeva organized a meeting in Maribor in 1959. Prof. Božena Ravnihar, Prof. Jože Stropnik, Prof. Stanko Hernja, Prof. Ludvik Tabor, Prof. Obrez and the SAR organized the eighth congress of the Yugoslavian radiologists in Ljubljana in 1972. Dr. Ludvik Tabor has served as secretary general of the Yugoslavian Society of Radiology for many years starting from 1968. The 1<sup>st</sup> and the 2<sup>nd</sup> Yugoslavian Congress of Radiology took place in Belgrade in 1935 and 1950, the 3<sup>rd</sup> in Zagreb in 1953, the 4<sup>th</sup> in Ljubljana in 1956, the 5<sup>th</sup> in Skopje in 1960, the 6<sup>th</sup> in Belgrade in 1964, the 7<sup>th</sup> in Pula in 1968, the 8<sup>th</sup> in Ljubljana in 1972, the 9<sup>th</sup> in Sarajevo in 1976, the 10<sup>th</sup> in Novi Sad in 1980, the 11<sup>th</sup> in Belgrade in 1984, and the 12<sup>th</sup> in Ohrid in 1988<sup>th</sup>.<sup>13</sup>



Figure 10. Prof. Dr. Jože Stropnik, 1971-1975.



Figure 12. Association of Radiology of the Slovenian Medical Association.



Figure 16. Assist. Prof. Dr. Dimitrij Kuhelj, 2006 -2010.



Figure 11. Prof. Dr. Dušan Pavčnik, 1982-1995.



Figure 14. Assist. Prof. Dr. Živa Zupančič, 1995-2006.



Figure 17. Prof. Dr. Ivo Obrez in the late 60s.



Figure 15. Slovenian Association of Radiology in the late 1990s.


<b>DRUŠTVO RADIOLOGOV SLOVENSKO ZDRAVNIŠKO DRUŠTVO</b>		
PREDSEDNIK prof. dr. D. Pavčnik	TAJNIK dr. D. Bobnik-Peskar	
PODPREDSEDNIK asist. dr. Ž. Zupančič	BLAGAJNIK dr. J. Knific	dr. M. Kolenc dr. N. Mudnič dr. I. Pisanec dr. S. Rainer dr. M. Škrbec

Figure 13. Letter head with the logo in the early 1990s.

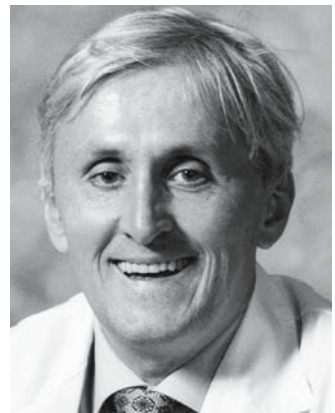


Figure 18. Prof. Dr. Dušan Pavčnik in the early 2000s.

The SAR and its presidents have organized and hosted successful meetings in most of the Slovenian cities. Due to the old X ray equipment in Slovenian hospitals in 1960s and 1970s, the radiation protection and systematic inspection and monitoring of working environments was an important issue during the term of primarius Dr. Vekoslav Janežič (Figure 9).

The permanent expert collegium (strokovni kolegij) consisted of the X-ray department chairmen in Slovenia who were appointed in 1974 as advising body to the SAR. That body provided expert assistance to the SAR on the field of the X ray equipment selection, radiation protection, and several other professional issues and questions (Figure 10).

The Slovenian Association of Radiology has been affiliated with the Journal of Radiology and Oncology published in English quarterly, covering all technical and clinical aspects of diagnostic and interventional radiology, radiotherapy, nuclear medicine, oncology, radiobiology, radio-physics and radiation protection. The history of publishing this radiological-oncological journal in Ljubljana dates back to 1964 when the first issue of *Radiologia Iugoslavica* was published. *Radiologia Iugoslavica* was co-founded by Prof. Ivo Obrez, Prof. Stojan Plesničar, Prof. Božena Ravnihar, Prof. Ludvik Tabor and Prof. Stanko Hernja. The seat of the editorial office has always been at the Institute of Oncology Ljubljana. In 1992, its 26<sup>th</sup> volume appeared under the new name of *Radiology and Oncology (Radiol Oncol)*.<sup>14</sup> More than half of editors were from the Institute of Oncology. The Editors from the SAR were: Prof. Ivo Obrez, Prof. Ludvik Tabor, Prof. Stanko Hernja, Prof. Mario Prodan, Dr. Peter Soklič, Prof. Dušan Pavčnik and Associate Prof. Igor Kocijančič. Prof. Dr. Ludvik Tabor served as the Editor in Chief from 1976-1981. Prof. Dr. Gregor Serša serves as current Editor

in Chief. Recently in 2008 our journal has been indexed and abstracted by Science Citation Index Expanded (SciSearch®). The next goal for the *Radiol Oncol* is to obtain the impact factor, often abbreviated IF. The IF is a measure of the citation to science journals which is frequently used as a proxy for the relative importance of a journal within its field.<sup>15</sup>

As the technology for radiology imaging has rapidly developed so has the need to train and educate radiologists who have an expertise in the clinical and scientific aspects of radiological imaging and interventional radiology. This has always been one of the prime missions of our association. The practice of radiology has changed beyond recognition since 1950 when SAR was founded. During Prof. Pavčnik's terms from 1982-1995 the use of the ultrasound, computer tomography imaging, magnetic resonance imaging and interventional radiology have become the daily routine (Figure 11). Just the term diagnostic radiology was not accurate anymore. According to the statute of the European Association of Radiology (EAR), radiology was defined as diagnostic and interventional radiology and medical imaging. Dr. Pavčnik left for 1 year fellowship in Boston at Harvard Medical School in 1984 and Dr. Erika Brenčič became acting president and kept that position for one year. We have organized several educational meetings in Ljubljana, Kamnik, Šempeter pri Novi Gorici, Izola, Kobarid, Golnik, Slovenj Gradec, Maribor, Ptuj, Novo mesto, Brežice, Ankarana and Celje. One of the highlights was the lecture of Dr. Myron Marx from San Francisco: CT examination of eleven Egyptian mummies from the Fine Arts Museum in Boston in 1987. In 1989, the SAR and Dr. Pavčnik organized the 6th Yugoslav meeting on interventional radiology in oncology in Ljubljana. Under the combined presidency of Prof. Pavčnik and Prof. Šurlan, it turned out to be a success. Overall, 5 invited

faculty from Europe and the United States, over 150 radiologists and 43 companies participated and supported the meeting, invited faculty and its meeting book.

In 1982 the SAR had 92 members. The numbers steadily increased to 128 members in 1995 and to 148 in 2008. Apart from education and clinical work, professional issues remained an important goal. For example, primarius Dr. Jurij Zalar and primarius Dr. Bogomir Celcer started protesting against the law which would decrease our radiation vacation benefits together with vacation down to 36 days per year at the SAR meeting in Slovenj Gradec in 1988.

The 1990s were years of transition for the SAR. During this time Slovenia declared its independence. Section of Radiology became the Association of Radiology (Društvo Radiologov) that has registered at the Slovenian Medical Association. The SAR has joined the European Association of Radiology. Our first true logo, pre-current logo was an image of Slovenia's map inside the double ring of the EAR logo. It was used in the letter head of the SAR (Figures 12, 13). Despite the war, Prof. Lazlo Horvath from Hungary and Prof. Moretin from the USA participated at the 1991 SAR meetings in Ljubljana during the time of the moratorium.

The SAR congresses have been taking place since 1996. The event originally took place every four years in different locations, starting in Portorož 1996, and then followed by Ljubljana 2000, Bled 2004 and Ptuj 2008. The current name of the SAR and its logo was suggested during the term of Dr. Živa Zupančič (Figures 14, 15). The SAR and Dr. Zupančič organized the 1<sup>st</sup>, the 2<sup>nd</sup> and the 3<sup>rd</sup> Slovenian Congress of Radiology.

The Slovenian radiological community showed its appreciation for Prof. Obrez's contributions to diagnostic and interventional radiology. Dr. Dimitrij Kuhelj, the current president (Figure 16), established the eponymous Ivo Obrez Lecture at every

forth year congress of the SAR. This eponymous lecture was introduced in memory of an individual who made a special contribution to radiology and to the Slovenian Association of Radiology (Figure 17). The first speaker was Prof. Dušan Pavčnik at the 4<sup>th</sup> Congress of Slovenian Radiologists in Ptuj in 2008 (Figure 18). In his lecture, early years of cardiovascular and interventional radiology, Dr. Pavčnik called the 1970s, 1980s and 1990s exciting years of our lives as diagnostic and interventional radiologists. Dr. Obrez's papers, book chapters, his lectures, inventions, including working beside him were a constant inspiration to us that changed our orientation from diagnostic angiographers to interventional radiologists. Ivo Obrez had a vision and the passion for this minimally invasive therapy.<sup>16,17</sup>

The SAR is one of the smallest societies of the European Society of Radiology. It has grown slowly since its foundation in 1950. Currently, the Slovenian Association of Radiology has 149 radiologists in all subspecialties.

## Acknowledgement

I would like to thank Erika Brenčič, Jurij Us, Marko Demšar, Dimitrij Kuhelj, Nikolaj Sadnikar, Elizabeta Baretič Kolar, Peter Soklič, Jana Shiro, Marijan Pocajt and Maja Podkrajšek for all their assistance without which this paper would not have been possible.

## References

1. Wilhelm Conrad Röntgen from Wikipedia. [http://en.wikipedia.org/wiki/Wilhelm\\_R%C3%B6ntgen](http://en.wikipedia.org/wiki/Wilhelm_R%C3%B6ntgen)
2. Hebein J. Ustanovitev in razvoj Rentgenološkega inštituta kliničnih bolnišnic v Ljubljani. In: Jevtič V, editor: *70 let Inštituta za radiologijo (1923-1993)*. Ljubljana: Inštitut za radiologijo; 1993. p. 17-47.

3. Jevtič V. Prof. Mira Vurnik Žumer, M.D., Ph.D. (1916-1998). *Radiol Oncol* 2000; **34**: 199-200.
4. Jevtič V. In memoriam: Prof. Ludvik Tabor. *Radiol Oncol* 1997; **31**: 320-1.
5. Book of Members, XII international Congress of Radiology, Tokyo 1969, October 6-11, p: 400-1.
6. Jevtič V. In memoriam: Prof. dr. Stanko Hernja, dr. med., 1918-2002. *Zdrav Vestn* 2002; **36**: 393-4.
7. Plesničar S. Personal communications 2009.
8. Šuštaršič J. The history of nuclear medicine in the Republic of Slovenia – pioneering age from 1954 to 1968. *Radiol Oncol* 1992; **26**: 83-90.
9. Šuštaršič J. The history of nuclear medicine in the Republic of Slovenia II – spread of the new medical speciality into peripheral hospitals from 1960 to 1974. *Radiol Oncol* 1992; **26**: 326-32.
10. Hojkar S. Personal communications 2009.
11. Dalla Palma Ludovico. The Alpe Adria Group – past present and future. *Radiol Oncol* 2002; **36**: 267-73.
12. Pavčnik D. Prim. Uroš Vizjak, dr.med. 1929-2008. *Časopis Delo*, rubrika Znanost. 8. January 2009.
13. Pavčnik D. Address on behalf of the Section of Radiology at 60 years anniversary of the Institute of Rentgenology in 1983; 1-3. Personal archive.
14. Benulič T. Radiology and Oncology. In: Zwitter M, editor. *Institute of Oncology Ljubljana 55 years: 1938-1993*. Ljubljana: Onkološki Inštitut Ljubljana; 1993. p. 88-9.
15. Science citation index from Science web of knowledge. <http://apps.isiknowledge.com>
16. Pavčnik D. In memoriam Ivo Obrez. *Radiol Jugosl* 1989; **23**: 193-4.
17. Pavčnik D. In memoriam Ivo Obrez. In Pavcnik D, editor: Meeting book at the 6th Yugoslav meeting on interventional radiology in Ljubljana, 1989. p 5-6.