



EDSA wishes you a joyful new academic year full of surprises, hard work, fruitful studying and unique experiences...!

DENTISTRY IS A WHOLE WORLD!

LET'S GET EXCITED, INTERESTED AND MOTIVATED TO EXPLORE ITS BEAUTY...

Dear EDSA friends and colleagues,

It has been almost a year since the last issue of the edsa magazine (summer 2002 edition) reached your hands. I hope that you have enjoyed your "journey" through its pages, that you have gained useful knowledge and that you have retrieved versatile information concerning dentistry in Europe.

Once again, I would like to thank all the students-authors who put their experiences, activities, personal thoughts and knowledge on paper, in order to share them with all of you! I also feel the need to thank Quintessenz for all the professional work and the unceasing support of various activities of EDSA. Last but not least, special thanks go to all of you who read the magazine and express your opinion through letters and e-mails. This is very fundamental, since we always take into account your comments and keep improving this tool of communication. Therefore, all of you play an essential role in the realization of each issue of the magazine.

During the last year, diverse interesting events took place. In July 2002, a delegation from EDSA joined the EPSA Summer University in Halkidiki, Greece, which was a significant step forward a more effective collaboration between the dental, pharmaceutical and medical sciences. In September 2002, the 30th EDSA meeting occurred in Ljubljana, Slovenia. We all savored a high level of organization, re-evaluated our targets, set up several pioneering projects and enjoyed ourselves greatly. An excursion to picturesque Bohinj Lake followed and the meeting was crowned with great success. During the same period in Ljubljana, the 28th ADEE and DentEd meetings were realized and EDSA had a dynamic presence. As you will read in following articles, EDSA cooperated with ADEE on several levels and the outcome was really promising and of major importance.

In January 2003, a pre-meeting preceded the 31st EDSA meeting and the 5th EDSA congress, in Belgrade, Serbia and Montenegro. The progress of the organization was assessed and obstacles were overcome. The 31st EDSA meeting took place in May 2003 in Belgrade and it proved to be very productive and important for the future of the EDSA projects. The 5th EDSA congress was realized right afterwards and we all enjoyed our Serbian colleagues' hospitality. A large number of students participated, but still the

warm atmosphere empowered the feeling of belonging to a family – the EDSA family. Numerous quality lectures and presentations underlined the high level of EDSA.

The following EDSA meeting will be in Santiago de Compostela, Spain, in September 2003 and we hope to see you all there to savor the EDSA spirit. Moreover, in September 2003, the next ADEE and DentEd meetings are going to take place in Dresden, Germany. EDSA is expected again to play a catalytic part and reinforce its educational orientation.

In the following pages, you will have the chance to get an update on all the EDSA events and activities. In addition, you will be given the opportunity to think about topics our colleagues have brought up, benefit from their experience, become acquainted with faculties around Europe, be informed on scientific subjects and a lot more. If you are inspired to contribute by writing an article, we will be more than glad to receive it!!

Let me remind you once again of our website (<u>http://edsa.globaldent.com</u>), through which you can subscribe to the EDSA e-group (<u>edsafriends@yahoogroups.</u> <u>com</u>). This is another very important means of immediate communication with all of us and a way of getting more actively involved in the diverse activities of EDSA.

I hope that you enjoy a profitable and prosperous "journey" through the pages of the current issue. On behalf of EDSA, I wish you a fruitful new academic year and much success in the exploration of the beauties of the dental world!

Maria Protopapadaki EDSA editor Athens, GREECE n behalf lew acas in the of the

Special thanks to Christina Sideri for sketching the cover page and page 12, as well as Ioanna Protopapadaki for sketching page 19.

Contents

Editorial: Dentistry is a whole world	3	EDSA Opinion	
EDSA Events 30 th EDSA meeting in Ljubljana, Slovenia 31 st EDSA meeting & 5 th EDSA congress	5 8	Ready, steady, go! Why do we mess up exams? Factors influencing the learning process	19 20 21
EDSA Activities European region, welcome! EDSAvision night EDSA goes on a visit	10 11 12	EDSA Experience The Central American experience Dentistry in the city with a fresh breeze A week with the Vikings!	22 24 25
ADEE – DentEd ADEE-EDSA workshop	14	Events in my country Dentistry in Spanish	27
DentEd evolves update EDSA honorary lifetime members EDSA Collaboration	16 17	EDSA Presentation Dental studies in Novi Sad, Serbia & Montenegro Hello from Georgia!	28 29
4th EPSA summer university	18	EDSA Researchers: Tissue engineering	30

EDSA MAGAZINE, Journal of the E.C. Dental Students Committee; Publisher: H. W. Haase; Editors: see "EDSA Committee" below. Editorial Office: Quintessenz Verlags-GmbH, Ifenpfad 2-4, D-12107 Berlin, phone: +4930 761 80-5, fax: +4930 761 80-680

Managing Editor: C. Klose; Production Manager: T. Pricker; Subscription Manager: A. Köthe; Advertising Sales Manager: S. Kwiatkowski Copyright © 2003 by Quintessenz Verlags-GmbH. All rights reserved. No parts of this journal may be reproduced without permission from the publisher. The publisher assumes no responsibility for unsolicited manuscripts. Articles are accepted with the understanding that they have not been published previously and that they are submitted solely to EDSA Magazine.

EDSA Committee

EDSA President

Mark Flynn Trinity College Dublin Dental Hospital Lincoln Place Dublin 2, IRELAND mobile: +353 86 377 65 06 e-mail: maflynn@dental.tcd.ie

EDSA Vice President Jure Poglajen Rojceva 26 1000 Ljubljana SLOVENIA mobile: +386 41 71 78 75 e-mail: dens@ksmf.org

EDSA General Secretaries Kimon Divaris 40 Dimitriou Ralli St. 151 24 Maroussi Athens, GREECE phone: +30-210-8061323 mobile: +30 694 575 6381 e-mail: kimond@otenet.gr

Neda Stefanovic Resavska 88/33 11000 Belgrade SERBIA&MONTENEGRO phone: +381 11 36 14 188 mobile: +381 63 777 2020





EDSA Treasurer Magazine Co-editor Johnny Käldström Pedagoggrand 11K- 202 S-90730-Umeå SWEDEN phone: +46 90 193037 mobile: +46 70 5864214

johnny_kaldstrom@hotmail.com

New EDSA Headquarters Swedish Dental Association Lotten Bergström, EDSA Box 1217 S-111 82 Stockholm, SWEDEN

EDSA Magazine Editor

Maria Protopapadaki 7 Pousoulidou St. 163 46 Ilioupoli Athens, GREECE phone: +30 210 99 39 768, +30 210 99 39 069 mobile: +30 69 77 028 088 e-mail: mprotopap@yahoo.gr protomaria@hotmail.com

EDSA Website http://edsa.globaldent.com

EDSA Web Master Marco Horvath Mocnikova 10 1000 Ljubljana, SLOVENIA mobile: +386 31 37 55 12 e-mail: forjanek@email.si





EDSA EDG Co-ordinator Marius Bud

EDSA e-library Co-ordinators Marius Bud Mark Flynn

EDSA EVP coordinators Kristin H. Randulff Nielsen Bjerregaards gate 28A N-0172 Oslo, NORWAY phone: +47 22 69 15 17 mobile: +47 98 65 93 36 e-mail: KHR@Nielsen.cc



Nemanja Longinovic Pozeska 77 11 000 Belgrade SERBIA & MONTENEGRO phone: +381 11 551399 mobile: +381 64 1261238 e-mail : zvnl@yahoo.com



Mark Flynn Jure Poglajen Maria Protopapadaki

EDSA Immediate Past President

Vasia Karathanasi 87-91 Faidriadon 113 64, Ano Kipseli Athens, GREECE phone: +30 210 86 50 294 mobile: +30 69 77 87 36 98 e-mail: vasia1996@yahoo.com







30[™] EDSA MEETING

LJUBLJANA, SLOVENIA, 4-9TH SEPTEMBER 2002

The 30th EDSA meeting was held in Ljubljana, Slovenia. It was preceded by a pre-meeting, which was also held in Ljubljana, in April. The premeeting was attended by delegates from Bosnia and Herzegovina, Greece, Ireland, Romania, Serbia and Montenegro and Slovenia. During the pre-meeting, the delegates planned the following meeting and familiarized themselves with the locations.

The 30th EDSA meeting itself was impeccably organized by the local organizing committee - Maja, Nusa, Tadeja, Tjasa and Marko - and its president, Jure. EDSA delegates from Croatia, Greece, Ireland, Norway, Poland, Romania, Serbia and Montenegro, Slovenia, Spain, Sweden and Turkey attended it. Georgia and Italy were also present as candidate countries. Additional members from Novi Sad University of Serbia and Montenegro and from Cardiff University of Wales, as well as an observing representative from EPSA (European Pharmaceutical Students' Association) also attended. A total of 36 delegates took part in the meeting, making it the biggest one so far.

The opening ceremony took place at the Medical Faculty and was led by Jure Poglajen. The EDSA past president, Vasia Karathanasi, welcomed everybody to the meeting and congratulated EDSA on its 30th birthday.

The delegates were given the opportunity to visit the different departments of the Stomatological



In front of the medical faculty.

Clinic and learn more about stomatology in Slovenia. The visit at the department of forensic medicine proved to be a very interesting experience, especially for those who do not study stomatology.

The meeting was held in different sessions at the Medical Faculty and the Stomatological Clinic. During the General Assembly (GA), we dealt with various issues, like the acceptance of new members, the election of the new Executive Committee, the anti-tobacco campaign and the exchange program.

Along with the GA, a delegation from EDSA had a joint meeting with DentEd about the DentEd program. A joint ADEE-EDSA workshop also took place. The main topic was "the role of EDSA in ADEE (Association for Dental Education in Europe) and DentEd (Dental Education)," and areas of cooperation between EDSA and ADEE were examined.

We were also given a guided tour in

Ljubljana. In the old town, we visited the City Hall, among other sites. In front of the building stands one of the most representative monuments in Ljubljana, the fountain with allegorical sculptures of the three Carniolan rivers. Close to the City Hall is Saint Nicola's Cathedral, which has the history of the Ljubljana diocese carved on its doors. The Ljubljanica river, also known as "The River of Seven Names", flows through the city between the Castle Hill and the city center. You can cross the river with the help of several beautiful and interesting bridges. The most famous one is the central Triple Bridge, which gives the city a special charm, as a gateway to the old citv.

On the other side of the river you find the Prešeren Square with its monument, named after the greatest Slovenian poet, France Prešeren. We also visited the

EDSA Events



In front of the old university of Ljubljana.

University of Ljubljana, which was founded in 1919, and now has more than 50.000 students. Next to the University is the Slovenian Philharmonic, which ranks among the oldest music societies in the world. The next day, we took a short trip to the central point of interest in Ljubljana, the Castle Hill. The Ljubljana Castle, perched on top of the hill rising out of the city center, has been keeping watch over the city for centuries. Its silhouette is an characteristic element of the skyline of Ljubljana. The castle's unique position offers a wonderful view of the city. As a final note, I might say that Ljubljana is a city that contains all the amenities of a large capital, while retaining the charm, kindness and relaxed atmosphere of a small town.

Meetings and sightseeing were not all we did. We managed to check out the nightlife of Ljubljana as well. Clubs, pubs, and bars are everywhere around the city center. Most of them have a specific style, from designed, to minimal or even Irish. However, no matter the style, they all turned into party stages for everyone late at night. The highlight of the "social" activities was the first official EDSA Vision Night. The victory went to Turkey, for the second time in row. The Turkish delegate – Taha – mesmerized us once again with the tunes of Tarkan. Runners up were the delegates from Italy and Ireland. The evening was a journey in great variety, treating us to music of different styles and quality. It will definitely be an experience that the participants will remember for the rest of their lives. An "after-meeting" in the mountains of Slovenia followed the meeting in Ljubljana. The organizers had rented two cottages by Bohinj Lake in Triglav National Park. Most of the delegates attended it and it turned out to be three wonderful days of sunbathing, swimming, and partying. We also had the chance to do some excursions, like visiting the beautiful waterfall Savica and taking a trip to the Ski Resort Vogel.

The 30th EDSA meeting in Ljubljana turned out to be a great success, both for the organizers and EDSA as an association. It definitely set new, higher standards for upcoming meetings and congresses. It was a week of hard work and partying, which enriched us with memories that will last a lifetime.

I hope to see you all at future meetings!

Johnny Käldström EDSA treasurer & co-editor Umeå, SWEDEN



31ST EDSA MEETING & 5TH EDSA CONGRESS

Belgrade, Serbia & Montenegro, 2003

For the very first time I got the chance to attend the EDSA meeting and congress in Belgrade, which proved to be, indeed, a very welcoming city. Traveling alone, I had to set aside all my anxiety of spending some time alone with people totally unknown to me. I had to follow my heart and accept the challenge. The results: I discovered an offbeat dental students' association that I never knew existed! Belgrade had the most beautiful location, the greatest amount of sunshine and was filled with very friendly people.

The slightly disheveled air, combined with the city's vibes, fine restaurants, street cafés and eastern European atmosphere made it an ideal place to hold a very cozy meeting for dental students from more than fifteen European countries.

The 31st EDSA meeting (31/3/2003 – 2/4/2003) was held at the Faculty of Stomatology in Belgrade. Vital discussions about important issues took place. We evaluated the progress of the current projects and set new goals. Among them, discussions about the European dental students' exchange program (EVP) proved to be very useful, interesting and informative.

The 5th EDSA congress (2/4/2003 – 6/4/2003) started with an unforgettable opening ceremony. His Royal Highness Crown Prince Alexander II Karadjordjevic officially opened the event. Her Royal Highness Princess Catherine attended the opening as well. We – the students – even got the chance to talk to the Serbian Royal Family Karadjordjevic afterwards. A joyful welcome party at the faculty of Stomatology followed.

In the next days, students from different faculties around Europe gave a large number of oral and poster presentations. In addition, instructive lectures by Prof. Zoran Vulicevic, Prof. Momir Carevic, Prof. Vitomir Konstantinovic and Danimir Jevremovic from the Faculty of Stomatology in Belgrade were held and they proved to be very interesting. Impressive lectures by the two veterans of EDSA, Aristomenis Syggelakis from the Faculty of Dentistry in Athens and Nikos Mattheos from the Faculty of Dentistry in Malmö, followed. The topics covered all the fields of dentistry and variety was the main characteristic. Finally, a workshop with the title "Dentistry versus Stomatology" was held. Diverse opinions were expressed and useful information was gathered.

The Serbian dental students were kind enough to show us around the faculty and the clinics. We also visited the clinic of pedodontics, where students had the chance to help the orphans with dental problems.

For those of us giving complicated lectures throughout the day, Belgrade nights were the perfect remedy. Cafés and restaurants made a pleasant stop for coffee, pints of



In front of the Prince Mihailo monument.

EDSA Events



At the opening ceremony, with the Serbian Royal Family Karadjordjevic.

beer and cocktails to drink our hard workday away. Downtown streets were serene until the students arrived to noisily liven things up.

Let us not forget the notorious EDSA tradition: the glamorous Song contest, which was held at the unforgettable 'Yellow café' and was hosted by Mark Flynn and Neda Stefanovic. Once more, our legendary Taha gave a great show, but it was Johnny Käldström from Sweden, who came out very convincingly and strongly, and finally won the 2nd EDSA Eurovision Song Contest. We also got the chance to visit the historical nucleus of this town. The narrow and wide streets were lined with nice examples of 19th century architecture, neo-classical and neorenaissance styles. Having a guided tour around downtown and the Kalemegdan fortress, we walked from the National Theatre and the Prince Mihailo monument down Prince Mihailo Street to the main church of Belgrade. Then, along the Kalemegdan fortress, we saw many interesting monuments, such as "Victor" and an old church called "Ruzica".

An official dinner in "Skadarlija" was our wonderful goodbye party. We savored Serbian cuisine to the sound of violins playing songs from different countries. "Skadarlija" is located on the cobblestone street where the first restaurants of Belgrade were opened and the Bohemians (artists, poets, actors, painters, writers, etc) of Belgrade used to gather.

I personally think it is a wonderful experience to meet such enjoyable future colleagues from all over Europe. Therefore, I must admit that my first visit to EDSA in Belgrade was a very productive and rewarding one. The sweet remembrance of this meeting and congress is something that all the EDSA members share and will always have in common. I hope that the next meeting and congress will be even more eventful than this.

To all those who have never participated at such meetings I would say: "Surrender to the charms of EDSA, come to the next meeting in Spain and find out for yourself!"

Many thanks to the organizers – Neda, Jelena, Maja, Vlada, Sloba and Nemanja – and all those who made this terrific time possible.



Houman Neshat EDSA delegate ACTA Amsterdam, THE NETHERLANDS houman@student.acta.nl



At the Kalemegdan fortress.

EDSA Activities

EUROPEAN REGION, WELCOME!

EUROPE 12 POINTS!

The EDSA family is slowly but steadily growing, not only in numbers of member countries, but also in new ideas and new activities. Therefore, I would like to warmly invite all interested European countries to join EDSA as full members and contribute to as well as gain from our common work. In this short article, I would like to present what EDSA involves.

First of all, EDSA has a long tradition of being involved in dental education in Europe and is in close cooperation with ADEE and the DentEd program. Secondly, I would like to mention that, at the Ljubljana meeting in September 2002, EDSA established the new Mobility Exchange program that will enable all European dental students to visit other dental faculties and gain experience from this exchange. The Norwegian EDSA delegate, Kristin Helene Randulff Nielsen, was elected to head the team that will be in charge of the new program. Thirdly, I must not forget the EDSA Anti-Tobacco Campaign, which was successfully brought to an end by our Romanian EDSA delegate, Ingrid Moldovan, and her team.

The last thing, of course, is the social nature of EDSA. Travelling around Europe, meeting new people and exploring other cultures is a unique experience that EDSA offers; especially our EDSAvision Night. The last one brings all our talents and unexpected possibilities to the surface.

To make it easier for future members, let me briefly explain what is needed in order to apply for full EDSA membership.

- An official request to the EDSA Ex-Co, expressing the wish to join EDSA.
- The local constitution should be sent to the EDSA General Secretary to see if it is in line with the EDSA Constitution.
- Payment of the EDSA annual membership fee, after the country has been accepted as a new full member.



Then, the EDSA Ex-Co will present the request to the next General Assembly, which will discuss it and make a decision. At the 30th EDSA meeting in Ljubljana in September 2002, Georgia and Italy were accepted as new full EDSA members, so we are honestly expecting a few more to follow.

So, let me again invite all non-EDSA countries to consider our "offer" and join EDSA!! For further information, please do not hesitate to contact us.

Jure Poglajen EDSA vice-president Ljubljana, SLOVENIA



EDSA Activities

EDSAVISION NIGHT UNDOUBTEDLY, A UNIQUE EXPERIENCE...

EDSAvision has now become a tradition and it takes place at every meeting and congress of EDSA. But what exactly is this event?

Delegates from each country choose a song and sing in their native language. They go on stage and give their best. Afterwards, all the countries give points to the songs and the one which collects the most points wins the cake, the champagne, and the applause.

The whole concept arose from the true goals of EDSA. More specifically, EDSA focuses not only on educational and scientific projects, but also on social activities for the delegates and participants. It gives them the opportunity to exchange information about the civilization and traditions of each country, it brings them closer, and consequently, a more fruitful cooperation is formed. From this aspect, the EDSAvision meets its goal, since the contestants share unique experiences and get to know each other better. Moreover, it helps us escape from the routine and anxiety of the educational courses and relax with this special night!

EDSAvision unofficially started at the 29th meeting in Athens, Greece, in February 2002. On the bus back from a dinner in a suburb of Athens, Mark and David (the Irish delegates) created a very cheerful atmosphere with their songs, and the other delegates spontaneously started singing traditional songs too! There was a lot of fun, laughter and excitement! At the end, everybody voted for the best performance and I was happy enough to be the winner!! It was an Oriental popsong, originally sung by Tarkan, a well-

known music star. Obviously, everyone was bewitched and we all agreed to go on with this event! Jure – who was responsible for the organization of the next meeting – announced that the first official EDSAvision competition would take place at the 30th EDSA meeting in Ljubljana, Slovenia.

So, the day arrived and the first official EDSAvision Night was welcomed with a lot of enthusiasm! A whole bar was booked just for us and the hosts were Jure and Kristin from Slovenia and Norway, respectively. Of course, all the EDSA delegates were present, but the surprise was the presence of the ADEE professors! Each country performed on stage with their national flag and sang marvelously with special style and very traditional colors. Some of them even accompanied their songs with traditional dances. I was the last one to compete. I sang "Yakalarsam Muck Muck" (another song from Tarkan) in Karaoke version and Maria from Greece danced with me to the music. Indeed, it was a great performance, everybody liked it a lot and I was more than happy to be the winner again!! After that, lots of fun, celebrating, and cakes followed and my colleagues asked me to go on stage again! The party lasted till early in the morning!!



went on and the second official EDSAvision competition took place at the 31st meeting in Belgrade, Serbia and Montenegro. The organizing committee had booked a whole bar for us again! The previous days, everybody kept talking about this event and obviously we were all waiting for that magic night! The night came and the atmosphere was full of songs, laughter, and anticipation. Mark from Ireland and Neda from Serbia and Montenegro were the hosts this time. Everybody's performance was really excellent and the winner was Johnny from Sweden, who really amazed us all. Afterwards, a long party followed and we had the time of our lives!

Unfortunately, time passed rather quickly but everybody was cheerful and relaxed. We felt as if we were in a different world! These unique experiences have brought our hearts closer and have filled us with unforgettable memories. That's why we are eagerly looking forward to the next EDSAvision.

Taha Özkan, EDSA delegate Selcuk University, Konya, TURKEY btozkan@hotmail.com

EDSA Activities

EDSA GOES ON A VISIT...

EDSA Visiting Programme at http://edsa.globaldent.com

At the meeting in Ljubljana, the General Assembly (GA) decided to build a brand new exchange program. EDSA wishes to help students going abroad, to make it as easy as possible to widen the horizons of knowledge, gain new experience, and make new friends! A subcommitte was set up to handle things, and their work has started to show some results.

The expression "students' exchange" itself does often mean: "one student takes another student's place and vice versa."...or: "two students or a group of students stay at each other's schools for a while...". To make this program as flexible as possible, it should be clearly said that you don't actually need another student to fill your spot if you leave your school. Or: if your faculty doesn't have the possiblity to welcome exchange students, it won't stop you from visiting a faculty that can welcome! Therefore, we call it "to go on a visit" ... and have named the project EDSA Visiting Program, or EVP for short.

A collection of the most necessary information will make it easy to choose where and how to go on a visit:

- Country
- Name and address of faculty
- · Best months to visit
- Any established exchange programs at the faculty?
- Previous exchanges or visits from other faculties/countries?

- Contact details of "visit-coordinator" student
- Contact details of "visit-coordinator" staff
- Number of possible days for visit
- Number of students allowed to come at one time
- System of learning: PBL, lecturebased etc.
- Number of students in faculty
- Numbers of years of study
- Type of accomodation likely to be available and approximate cost (Euro)
- Approximate cost per day (food, transportation, etc.) (Euro)
- Possibilities for pre-clinical visit?
- Possibilities for clinical visit?

The facts for each country joining the EVP will be made public at our website with help from our fabuolus webmaster Marko. A report form will be available at the website as well. These reports will easily help you to find your favorite destination, and us to have a database for each faculty. We have already got some countries on our list but, still, some of our member countries are missing...

Get curious, come to our site, go for a visit!

On behalf of the subcommittee, including Kristin Nielsen, Maria Protopapadaki, Mark Flynn, Jure Poglajen, and Nemanja Longinovic.

Kristin Helene Randulf Nielsen EDSA delegate Oslo, NORWAY KHR@Nielsen.cc

ADEE – DentEd

ADEE-EDSA Workshop

The role of EDSA in ADEE and DentEd Programme



Cooperation between ADEE and EDSA started in 1998, when research on student satisfaction with the quality of dental education was conducted. Nikos Mattheos presented the results of this research in Milan on behalf of EDSA.

In September 2000, a small EDSA delegation attended the ADEE meeting in Stockholm, during which Prof. Rohlin helped organize a work-shop about students' involvement in the curriculum development. It was expanded into a survey (ADEE-EDSA Questionnaire), which ended in November 2002.

In September 2001, during the ADEE Meeting in Bern, a workshop about PBL and traditional teaching methods took place.

Finally, in September 2002, the first joint ADEE-EDSA meeting took place, in Ljubljana. During this meeting, an ADEE-EDSA working group held a session. Prof. Derry Shanley, Prof. Madelin Rohlin, Prof. Uros Skaleric, Prof. Mark Brennan, Prof. Henk Kersten, Prof. Fusun Ozen, and Dr. Nikos Mattheos were present on behalf of ADEE. EDSA was represented by all the delegates who were attending the 30th EDSA meeting (delegates from Ireland, Greece, Slovenia, Sweden, Spain, Norway, Romania, Poland, Serbia and Montenegro, Italy, Georgia, Croatia, and Turkey).

In this article I will try to give you a short review of what was discussed during the workshop.

At the beginning, it was pointed out

that ADEE and EDSA have a common goal, which is to improve dental education – dentists all over Europe should be educated to the same standards, and be able to work anywhere in Europe. If you thought that these "same standards" imply a "one-size-fits-all" model, you were wrong. The main point is to establish minimal standards and preserve diversities that exist at each faculty. The final outcome should be the improvement of oral health in Europe.

One of the first topics discussed was "How and why should students be involved in DentEd?"

DentEd and DentEd Evolves are thematic networks trying to harmonize and converge dental education and in this way, ensure similar outcomes all over Europe.

According to Prof. Rohlin, the time has come when students are important players in the DentEd and DentEd Evolves. Students should be seen as future colleagues. They are important because of the "hidden curriculum" (what is actually going on), and are also the pressure group for schools to act according to the recommendations of DentEd. Prof. Brennan pointed out that talking to students was the most helpful part of the DentEd visits; Prof. Kersten agreed and said that new things were heard from EDSA delegates during the joint workshops at the DentEd meeting.

We then proceeded to establishing

goals of the ADEE-EDSA cooperation and of course ways and methods by which these goals can be achieved.

Prof. Rohlin suggested we should try to find ways of establishing contacts between dental students from different countries. Not only dentistry should be discussed among them – they could also learn about each other's culture and this would lead to internationalization of education, from which not only students would benefit, but also the teaching staff.

The best way for getting to know students from other countries is student mobility, i.e., exchange program. Since it is very difficult to organize Erasmus, Leonardo, Socrates or other standardized exchange programs for dental students in Europe, it was suggested that a program of short-term exchanges (2-3 weeks) should be established. A joint ADEE-EDSA working group was formed to facilitate the gathering of information. It was agreed that the information should be made available on the EDSA website and should undergo constant updating.

Student exchanges would also be evaluated, so that everyone could benefit from it. Submission of standardized reports by the students who have taken part in the exchange program should be encouraged, and thus a database could be created. The information gathered would be available for further analysis to both EDSA and ADEE.

ADEE – DentEd

As far as the finances for the exchange program are concerned, it was suggested to seek sponsors who would cover the travel or accommodation expenses. It was also mentioned that some Universities have the possibility of hosting students on campus.

Another way of connecting students is through summer schools or summer universities. Educators and students from around Europe could gather over the period of 2-3 weeks and exchange ideas, experiences, knowledge, promote the internationalization of education and get to know each other's cultures.

At the end of this workshop, two questions arose – "Is ADEE interested in postgraduate education?" and "How can ADEE benefit from the experience of students who were involved in EDSA?".

All the experience and knowledge are lost once people graduate and leave EDSA. It was suggested that a young dentists' alumni group could be formed in ADEE in order to keep the continuity, and those students who were interested in education could enter ADEE. In that way, postgraduate students and qualified dentists could help the ADEE with the issues of both undergraduate and postgraduate education.

After the discussion had finished, certificates of Honorary Lifetime Membership were given to Prof. Madelin Rohlin and Prof. Derry Shanley, and a letter expressing gratitude was given to Prof. Uros Skaleric.

Neda Stefanovic DDS EDSA general secretary Faculty of Stomatology University of Belgrade SERBIA & MONTENEGRO



Association for Dental Education in Europe 29th Annual Meeting 3 - 6 September 2003 Dresden, Germany Topics: •Critical review of Problem Based Learning • Stress among staff and students as it relates Information:http://www.odont.ku.dk/adee/ e-mail:harzer@rcs.urz.tu-dresden.de

ADEE – DentEd

DENTED EVOLVES UPDATE

Dental Education: Accreditation and Convergence



The General Dental Council on 10 February 2003 in London was the venue for 86 representatives from 23 European countries and the USA to discuss European convergence in standards of dental education. The event was co-hosted by Darmuid Shanley, convenor of DentEd, and Nairn Wilson, President of the General Dental Council (UK). Dental educational trends and desired aims in Europe were discussed in the context of presentations on five themes identified and discussed in the DentEd process and finalized at the Global Congress in Prague in 2001. Delegates agreed that it would be desirable to continue the DentEd process to meet the challenges of an enlarged EU.

An overview was given of the collaborative work in which European dental educators need to engage to meet the requirements of the Bologna Declaration. It was envisaged that further work and discussions on these challenges and requirements could lead to joint recommendations at the annual meeting of the Association of Dental Education in Europe (ADEE) in Dresden in September 2003. These initiatives would be linked with those taken by the American Dental Education Association (ADEA), hosting a global congress on dental education in 2004/2005.

National systems of accreditation and quality assessment in Spain, the United Kingdom and the USA were described. These could serve as possible models or guides towards a joint European mechanism for accreditation. It was agreed that the General Dental Council's document "The First Five Years: A Framework for Undergraduate Dental Education" should be published on the DentEd website to serve as starting point for the development of a common profile for dentists against a global backdrop. The document translates the aim of undergraduate dental education and the specific learning outcomes into a list of the "What, How and Who" for a graduating dentist. European dental schools are asked to comment on the list with the view of reaching a common core curriculum.

It is, therefore, of vital importance that EDSA raise a reliable voice on the issue of accreditation systems and convergence, and join in the discussions with significant input. Upcoming meetings (ADEE Congress in Dresden, Germany, and EDSA Meeting in Santiago de Compostela, Spain) in September are indeed important opportunities for European dental students to initiate awareness actions and collaboration on this evolution, which could ultimately be discussed and applied in a global context.

Kimon Divaris EDSA general secretary Athens, GREECE



EDSA HONORARY LIFETIME MEMBERS

At the last EDSA meeting in Ljubljana, Slovenia, it was decided to award lifetime EDSA memberships to two individuals who have made an outstanding contribution to EDSA and to the furthering of its goals.



Prof. Madeleine Rohlin from the Dental Faculty of Malmö, Sweden, is a significant member of the Association for Dental Education in Europe (ADEE) and has had an active role in dental education in Europe for many years. With her role as General Secretary of the ADEE, she has endeavored to extend the say of stu-

dents in their education. In recent years, the EDSA has been expanding its sphere of influence so as to better represent the dental students of Europe and, in order to do this, has formed affiliations with other like-minded associations. One of the most important affiliations formed over the past years was that with ADEE, and Prof. Rohlin was one of the main catalysts in this collaboration. The EDSA is now fully involved in ADEE, and with our input increasing with each meeting, we felt that Prof. Rohlin's contribution to dental education, dental students and EDSA should be recognized.



Prof. Darmuid Shanley from Dublin Dental School, Trinity College, Dublin, Ireland was the founder of a project called DentEd, which then progressed to another, DentEd Evolves. The DentEd project (for those who are not familiar with it) is a thematic network that was set up to develop a set of guidelines

for dental schools to increase the quality of education in Europe. This was done by visits to as many schools in Europe as possible over a five year period, the meeting of professional dental educators from all over Europe and the USA twice a year, and also on an interactive website (<u>www.dented. org</u>). Over the past two years, EDSA has become increasingly involved in this project, thanks to Prof. Shanley and his enthusiasm getting students involved in every aspect of dental education. Prof. Shanley, as well as being one of the most respected dental educators worldwide, has somewhat taken the EDSA "under his wing," helped greatly in the financial aspects of our association, and increased our sphere of influence.



At the meeting in Ljubljana, it was also decided to present a "thank-you certificate" to **Prof. Uros Skaleric** for the help and support he gave the EDSA in organizing its meeting in Ljubljana. The help he gave allowed the coordination of the meeting along with the ADEE and DentEd meetings that were running

concurrently. Therefore, he allowed a full program to be more easily organized.

Both Prof. Rohlin and Prof. Shanley have been of great assistance to EDSA and the achievement of our goals, and we thank them for their help. We hope that now that they are Honorary Lifetime Members they will continue to assist us in representing the dental students of Europe.

David Suitor Past general secretary Dublin, IRELAND

4TH EPSA SUMMER UNIVERSITY

Halkidiki, Greece, July 13–19, 2002

One of the greatest EPSA (European Pharmaceutical Students' Association) events is the Summer University (SU), which is organized every summer by one of the EPSA member countries. When you think of the summer, what immediately comes to mind is the time spent with wonderful people, enjoying the sun and having fun. But the Summer University itself has one very important task: to bring the participants into the endless world of Pharmacy once again. And here comes the hardest task of the Reception Committee - they should choose really interesting topics and lecturers who will be able to attract participants' attention from 9:30 a.m. to 1:30 p.m. In summer 2002, the SU took place in Halkidiki, Greece. Through this article, I would like to thank once again the EPSA SU Reception Committee (RC) from Greece, who put great efforts in organizing everything and made those days incredible and unforgettable for everyone.

As far as the social part of the SU is concerned, the EPSA RC had prepared a lot of surprises for us. The hotel was located right next to the sea and we spent all the afternoons at the beach, having a great time. In the evening, we were taken either to clubs or beach bars. We especially liked the traditional Greek night, where we got acquainted with traditional Greek food, wine, songs and dances. We were also given a free day in Thessalonica and a guided tour to Vergina and the tomb of



Philip II. On the last night, a beach party was organized, with a lot of music, souvlaki and night swimming.

This SU was very important also because it was the first time that a workshop concerning the intersections of pharmacy, dentistry, and medicine took place. We were very happy that a delegation from EDSA (Vasia Karathanasi, Kimon Divaris, Maria Protopapadaki and Jure Poglajen) and EMSA (George Dafoulas) joined us. In this way, we had the chance to get familiar with each other's science, share ideas and consider certain platforms for creative cooperation and for developing common projects.

At the following EDSA meeting, which was held in Slovenia in September 2002, a delegation from EPSA (Jorrit Neumann, Ece Bilge and Anita Martinova) was invited. Looking back, I can say once again that it is very important to participate in each other's events. Indeed, it is the best way to feel the spirit of the association, see how it works, and realize the common fields of collaboration, because this is the key for really effective and fruitful cooperation. I met wonderful people in EDSA and it is very difficult to express how grateful I am to the EDSA Reception Committee and to all of you I met there.

I am sure you will agree that all in all, WE -the students in pharmacy, dentistry and medicine in Europe – are Health Providers and in order to help people secure the greatest treasure, HEALTH, we need to start the cooperation between students' associations. Then, it will naturally continue when we become professionals!

Anita Martinova EPSA general secretary 2002-2003 Sofia, BULGARIA

READY, STEADY, GO!

The Chronicles of our Emotional Rollercoaster



So, you have graduated from high school, you have done your homework, you had those exams and now you are a dental student...everything sounds great...but what does it feel like for a dental student?

Have you ever felt that you are under a lot of pressure? Have you ever felt, at the end of a fully-packed day, very desperate to find some courage to study that mammoth book on your desk and get ready for your exams or maybe to make your patient realize why the oral treatment has to be done the right way - and not his or her way? Well, slow down; you are not the only one who feels like that! As a dental undergraduate, apart from studying, you have to develop three more abilities: communicating with your patients, cooperating with your supervisors and staying calm when you are practicing a treatment on a patient that you have never done before or when emergencies and other strange things occur out of the blue.

There is a big difference between the dental students and the students of the majority of the other departments of a university: getting in touch with patients on your own. Personal communication between dentist and patient is of primary importance in dental practice. You have to communicate and cooperate with people that you have never seen before, people of all ages and financial and educational levels and try to be friendly with them and gain their respect. You may have prayed for a smart, good-looking and pleasant patient but life is tough, I know: frequently your patients aren't just what you hoped for. Sometimes you have to explain to them every little thing that may occur during the treatment and try to convince them that everything is alright. This may be boring from time to time and make you feel even more tired than you already are. We can divide students into two categories: those who feel very self-assured when talking and meeting other people (and patients) and those who don't feel comfortable doing it. Things sound undemanding for those who are very sociable, but there are many students who feel very insecure when speaking with someone they have never met before. Even if communicating with people is not your cup of tea, suddenly you have to modify the way you think and act you have to be welcoming, just like you had invited them to your home. Cooperating with your supervisor is another critical part of your practice. A deferential attitude towards your supervisors is vital. Helping an undergraduate student is not always the easiest thing to do. Most of them want the best from you and they are trying to teach you and show you as much as they can - no question about it - but we are human beings and we all have good and bad moments. Tension can often occur, and what you thought would be pleasant work turns out to be a completely different experience. Psychological research has shown that the sense of power over other people can make someone act completely different and become bad mannered or aggressive even if there is no intention of that. Kindness and understanding are the only means of balancing the relationships between you and all the people that you cooperate with. When tension occurs, an excuse doesn't cost a thing - as you may have heard, good relations is the kind of gift Santa doesn't deliver, so you have to work for it on your own.

In my estimation, the most difficult thing that any one of us has to face is when practicing on something entirely new, or maybe those "ohmy-God" things start to happen, and at the same time you have to try to make the patient feel secure. You may have read over and over again all those things in detail that you have to do, all the rules that you have comply with, and all those emergencies that may happen from time to time and what to do, but fiction is always different from reality yes reality is the tough one. Medical experience isn't the thing that defines you when you are 20 or maybe 23, but you at least have to stay calm. This may sound easy, even though we all know it isn't. Trying to do some stress management is the best that you can do. Simple meditation, like focusing on your breath, can help clear your mind of distracting or stressful thoughts. Every dentist and doctor was in your shoes sometime in the past, and we must not forget that all of us will face an urgent situation in the near future at least once. By the way, don't forget to wonder why this thing happened. Sometimes you can avoid it if you are concentrated or careful enough.

We have to face it: dentistry may sound exciting when you are in high school, but it isn't the easiest profes-

sion around - nor the toughest one, either. Don't get depressed when things aren't going as well as you thought they would. Everything feels extraordinary when you are just a kid, so whichever profession you had chosen, it would prove to be tougher than you thought it would. And please don't forget, if you feel totally freaked out, there is certainly life after dentistry: some good CD stores, a dozen or so movie screens, two to four close friends and that terrific Mexican restaurant are around. An entire world is waiting out there for you to discover!

Constantinos Christogiannis 5th year dental student National and Capodistrian University of Athens, GREECE



WHY DO WE MESS UP EXAMS?

A year has 365 days for you to study. After taking away 52 sundays, there are only 313 days left. There are 50 days in the summer that is way too hot to work so there are only 263 days left. We sleep 8 hours a day, in one year that counts up to 122 days so now we're left with 141 days. If we fooled around for only 1 hour a day, 15 days are gone, so we are left with 126 days. We spend 2 hours eating each day, 30 days are used in this way in the year, and we are left with 96 days in our year. We spend 1 hour a day speaking to friends and family, that takes away 15 days more and we are left with 81 days. Exams and tests take up at least 35 days in your year, hence you are only left with 46 days. Taking off approximately 40 days of holidays, you are only left with 6 days. Say you are sick for a minimum of 3 days, you're left with 3 days in the year to study! Let's say you only go out for 2 days! You are left with 1 day! But that 1 day is your birthday... so...

Good luck to everyone on your exams.



Bogdan Vigdorovici-Popa 6th year dental student Faculty of Dental Medicine "Iuliu Hatieganu" Cluj-Napoca, ROMANIA

FACTORS INFLUENCING THE LEARNING PROCESS & PERFORMANCE OF DENTAL STUDENTS

Dental education stands out as a unique pedagogical procedure; stepwise, students form a core of basic sciences, medical and biomedical knowledge to support their dental-specific studies. Contemporary curricula also include elements from social and behavioral sciences, practice management and new technologies. Furthermore, within the usual 5-year program, the dental student is expected to develop critical thinking, certain manual competencies, and clinical skills.

In such a multidisciplinary process, a plethora of factors can be associated with performance in undergraduate dental education. Studies describing the educational experience of dental students traditionally have focused on characteristics of the learner or the environment, while little work has been done to describe the processes that affect the students' well-being and performance. Moreover, the lack of systematic application of theoretical learning models in the vast majority of dental schools has undermined thorough assessments so far.

Dental school is a highly pressurized, difficult and demanding environment for students, although the latter represent only a restricted upper-range of talented or skillful young individuals, hence the admission systems and requirements. Once in the system however, this upper range has been reported to spread over a fairly normal distribution. It is worth mentioning that although pre-dental and dental aptitude tests (DAT) scores may be reliable predictors of failure for academic reasons, they cannot be applied as criteria of dental-specific performance at university.

Several characteristics of the learning environment have been documented as influential on mood, wellbeing, distress and performance reports of dental students. Different teaching methodologies, educational approaches and systems, such as collaborative, problem-based or interdisciplinary learning, despite their focusing on the learner, have been shown to have little influence on the overall performance of undergraduates. Undoubtedly, the aforementioned innovative pedagogical approaches provide future dentists with a holistic approach to patient treatment and a lifelong learning orientation; however, more emphasis should be placed on the individual characteristics of students, as equal partners in the educational process. Understanding how students psychologically and socially experience their education may be an important step for removing barriers to learning. Social learning theory, attribution theory and the stress-distress paradigm were used by Tedesco to support a theoretical model of describing the processes that enhance or detract from performance in dental school. Model elements for predisposal to distress and failure included high levels of perceived educational stress, passive coping style, physical complaints and symptoms, and other

social or environmental factors. Furthermore, stress appraisal and individual explanatory styles seemed to be determining factors of an active or passive attitude towards the educational environment, in cases when an energetic approach is beneficial or demanded; i.e., inconsistency of feedback between clinical instructors.

Many students reportedly find themselves in a continuous conflict between the necessity to study and the necessity to relax or do something not connected with dentistry. The presumably acquired ability to cope with high demands of dental education such as class assigned workload, financial pressures, lack of time for relaxation, and other inherent stress-provoking factors, extends beyond the curricular requirements. Undergraduate students are exposed to virtually all professional clinical and interpersonal stressors, and thus, a successful response within the educational environment indicates the acquisition of skills and values necessary to avoid professional burnout at a later stage.

Kimon Divaris EDSA general secretary Athens, GREECE

THE CENTRAL AMERICAN EXPERIENCE

Last summer, I spent two months in Central America with some of my friends from dental school. We were there both for a holiday and to undertake some voluntary dental work. I had managed to contact the director of a hospital in a town in Honduras who was very keen for us to come and work there for as long as we could.

We had no set itinerary before we left: only the arrival in Mexico City and the departure from San Jose in Costa Rica.

MEXICO

Our first impressions of Mexico City were not good. Everything looked dirty and run down, and the weather was a lot colder and wetter than we had expected to find in Central America, but as we started to explore the place a bit and met some very friendly local people, we started to enjoy it. We met a few friends from Ireland who had been travelling down through Mexico from Los Angeles and headed south with them to Oaxaca, a beautiful little town with great markets, and from there to Puerto Escondido, a village with several stunning beaches on the south coast. This was where we found our first taste of sunshine and, in true Irish form, stayed on the beach all day without sunscreen (when even the Mexicans were wearing T-shirts) until we were all bright red and unable to walk without pain.

GUATEMALA

From Mexico, we crossed the border into Guatemala, and the first stop was Lake Atitlan and its surrounding villages. The scenery was breathtaking and all the villages



were full of the indigenous people in their very colourful attire. There was a great atmosphere and we could have stayed for much longer. The small city of Antigua was next and the slightly hazardous climb of volcano Pacaya. Climbing the last stretch of steep soft ash with gale force winds blowing around us is something I won't forget quickly. We could have stayed in Guatemala for a month, but the date we were expected at the hospital in Honduras was approaching.

HONDURAS

Our first stop in Honduras was the stunning ruins of Copan and from there we headed to La Ceiba, where we found a white water rafting tour. This was set in the middle of the jungle, miles away from the nearest town. Although I lost my sandals and several paddles, we managed to escape death and had a fantastic time.

Next was Trujillo, where we had been expected. The hospital there was very small, with only one dental chair so they decided to make better use of us and we headed to a village about an hour away, armed with forceps and anaesthetic. Because of the lack of facilities, all we could carry out was extractions. The peo-



EDSA Experience



ple there were incredibly friendly and welcoming, and very grateful to us. The children had no idea that sweet things were bad for their teeth, so with the help of our translator (a sister of Miss Honduras 2001!), we gave them advice on how to look after their teeth. The people we met from Trujillo were really good to us, finding us translators and very cheap accommodation in a beautiful old hotel and making sure we had everything we wanted. We grew attached to Trujillo and really didn't want to leave, but the following destination, the Bay Islands, helped relieve us.

We went to the island Utila for our scuba diving course. Utila was swarming with people and there were parties every night. I can't describe the sensation of swimming in the warm Caribbean water with thousands of tropical fish and coral all around. It has to be experienced. From there, we flew to Nicaragua, only staying briefly in Granada and on the unusual Ometepe island, made up of two volcanoes in the middle of Lake Nicaragua, and then headed south to Costa Rica.

COSTA RICA

By the time we reached Costa Rica, we were beginning to feel a little tired of all the travelling, so we found Tamarindo and stayed there for the last week of the holiday. There was a beautiful beach with great restaurants and clubs all around and lots of activities, the most memorable of which was the canopy tour, where we zipped through the rainforest at high speeds with cables attached to our waists.

Finally we reached San Jose and, before we departed, made time for a bungee jump off a bridge and, once again, escaped death.

Overall, Central America was the trip of a lifetime and I would highly recommend it for either volunteer work or just for an amazing holiday experience. If anyone would like more information about volunteer work in Honduras or about any other aspect of Central America, feel free to contact me.

Mark Flynn EDSA president Dublin, IRELAND





EDSA Experience

DENTISTRY IN THE CITY WITH A FRESH BREEZE



Last year in Zagreb, the Second European Conference on Bone Morphogenetic Proteins was held under the organization of Prof. Dr. Sc. Slobodan Vukicevic, who is one of the leading scientists in that field. At the conference, there were a lot of famous and respected scientists from Europe and around the world. Among them, PD Dr. Dr. Soren Jepsen and PD Dr. Dr. Hendrik Terheyden from the University of Kiel were present. It was my honor to meet with PD Dr. Dr. Jepsen, and I took the opportunity to ask him whether I could visit his University. Dr Jepsen accepted my wish with pleasure, which has, after a few emails, come true.

In August last year, I spent three weeks in Kiel. It is the capital of the northernmost federal state of Schleswig-Holstein in Germany, with a population of roughly 240,000. Kiel enjoys an international reputation as a university town and center for sailing.

During that three-week period, I observed procedures in the Department of Operative Dentistry and Periodontics and assisted at surgeries in the Department of Oral and Maxillofacial Surgery. I also had the opportunity to visit the science laboratory, where I actively participated in experimental research. For



me, one of the most interesting research projects was when BMPs (bone morphogenetic proteins)

were applied on the bone defects of cranial bones in mini-pigs. At the clinic, I met many kind and

generous people, and I hope I will be lucky enough to visit them once again.

Of course, none of this could have happened if Professor Slobodan Vukicevic had not organized that conference. Therefore, I would like to take this opportunity to thank him as well.

Nikolina Trupeljak EDSA delegate Zagreb, CROATIA



At the Department of Oral and Maxillofacial Surgery

A WEEK WITH THE VIKINGS!



It all started one Saturday morning, in O c t o b e r 2002, as we reached the

The Center for Oral Health Sciences of the University of Malmö

coastline of Sweden on our way

to Malmö. The week that followed was an amazing experience that is impossible to describe in a few pages, neither is it possible to mention all the events that took place and the people that welcomed us. However, in the few lines that follow. I will briefly present some of our reflections on this short exchange. One of the first "sights" in Malmö Dental School is of course Problem Based Learning or just "PBL". PBL is not just a methodology, but a whole philosophy in learning, which was introduced in medical education in the late 60s. From the very beginning, students are organized in small groups, and lectures are replaced by group work and discussion. Every week, the aroup is provided with a clinical case, the "Problem", which is worked out through 7 steps: 1) analyze the facts, 2) identify the problems, 3) generate hypothesis, 4) systematic inventory of ideas, 5) identify learning needs, 6) obtain knowledge, 7) suggest solutions. During this time the students have to define what they need to know and actively search for the information they need. By creating and testing their own hypotheses, students reach their learning objectives by the end

of the week. We felt that PBL is a very modern way of educating dentists, motivating students to be active, responsible for their own learning and better prepared to deal with problems.

The system for the students' selection in Malmö is another interesting point. Every year, sixty new students are admitted to the school. Fifty percent of them are chosen by the national selection on the basis of their grades. The rest are selected locally by the faculty after an interview and some tests. In this way, students who are very well suited to healthcare studies, but do have not the highest grades, can still have a chance to pursue their dream. Both students and faculty are very satisfied with the local intake system, and results from the first years will be published soon.

The Dental School in Malmö is very much oriented towards prevention. Much of the school's education and research is devoted to prevention of caries, periodontal disease and all kinds of oral pathology. For example, professor Douglas Bratthal has developed a computer-based system for risk assessment of caries "Cariogram". called the The Cariogram is based on two specific tests and a detailed history of the patient, and it is used in many parts of the world.

Clinical practice in Malmö is very well organized and starts early in the curriculum, as students contact patients already in the first year. In the last two years, students work in the integrated clinic, where they treat all kinds of patients from the beginning till the end. We especially liked that in the integrated clinic, instead of running after the teacher, the students place a "ping-pong" ball with their number on a special board.

Professor Jan Rosenqvist introduced us to the Swedish Healthcare System, which looks very interesting. We were surprised to notice that a patient has to pay much more for

an amalgam filling than a composite one. This is because the Swedish government does not support the use of amalgam re- At

storations. At the De-



At dinner with the Periodontology-Cariology dream-team.

partment of Periodontology, Professor Gunilla Bratthal and Dr Henrik Jansson presented the research within the department. Then the "retired" EDSA grandfather, Nikos Mattheos, guided us through the world of Virtual Interactive Periodontology and offered us a CD-ROM in clinical periodontology by Professor R. Attstrom.

As you would guess, a big part of our visit was the contact with student life in Malmö. The student association is very active and very much involved in education and decision making in the school, as well as other areas such as sports,

EDSA Experience



culture, international relations etc. We met the students at the clinics, during lunch and coffee breaks, as well as in their frequent parties within and outside the dental school. Our last day in Malmö happened to be a very special one, as it was

Prof Gunilla Bratthal and the whole Polish team.

the day of the annual theater performance, the "spex", organized by the first year dental students. The play was followed by a big Swedish dinner, with traditional "schnapps" and singing and of course a big party till late!

Of course, our stay in Malmö was not just about dentistry, and our hosts prepared a very full program for us with many surprises: visits to all sorts of places, from the hospital to the Art Hall, parties, sightseeing in the city, meetings with many interesting people within and outside the dental world. Last but not least, our visit concluded with a wonderful dinner at the Bratthals, where periodontology met cariology and mixed with some wine, live music and lots of humor in a wonderful atmosphere!

Looking back, it is amazing to realize that all this happened in just one week, a week that left us with plenty of inspiration, new ideas and motivation. We are looking forward to the continuation with our friends in Malmö, and we are waiting for the opportunity to welcome them in Warsaw.

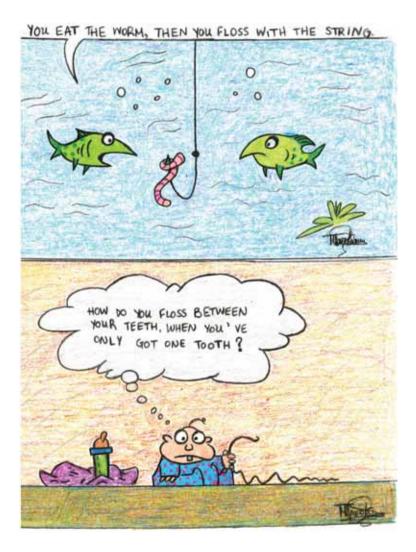
Acknowledgments

It would be impossible to mention here all the people we would like to thank. However, we feel especially grateful to Prof. Maria Wierzbicka, Professors Gunilla and Douglas Bratthal, Prof. Lars Matsson, Anders Stenlaas, Prof. Maria Nilner, Assoc. Prof. Cristina Lindh and Dr. Adam Okon, for giving us the opportunity to experience all this. Also, many thanks to the "EDSA veteran", Dr. Nikos Mattheos, for all his help and hospitality.

Mariola Sztogryn 5th year dental student Warsaw, POLAND



EDSA Fun



Events in my Country

DENTISTRY

Last July, Santiago de Compostela was the host of the IX Congress of ANEO (Spanish Dental Students' Association).

For a whole week, people from all the corners of Spain gathered in order to attend an interesting scientific meeting, which included lectures given by eminent professors of our country. They discussed the future of dentistry, without leaving out the new discoveries of the dental world.

Although the scientific program is the center of a congress, we can't leave out the essential role of the social part. One of the most important objectives of our Congress was to get all the faculties in touch, as well as to encourage people from everywhere to enjoy the same things during this week.

I can't explain on a piece of paper all the emotions I feel when I think about that congress. It is ineffable! You must experience it in order to know what it means!

The next meeting will be held in Seville in July 2003. So if you want an unforgettable experience and discover the Spanish "fiesta" (of course, without forgetting dental research), we will be waiting for you



this summer, in one of the most beautiful cities in the world! Last but not least, I would like to thank the Organizing Committee (Paula López, Fernando Rey, Ana Mateos, Laura Somoza) for having worked so hard to carry out such a successful congress.

David Puente Arias EDSA delegate Santiago de Compostela, SPAIN

EDSA Presentation

DENTAL STUDIES IN NOVI SAD, SERBIA & MONTENEGRO



Novi Sad is the capital city of the a u t o n o m o u s province of Vojvodina, Serbia and Montenegro. It is positioned in the north of Serbia, 100 km north of Belgrade. With 300,000 inhabitants, it is the largest city

in Vojvodina, as well as the economical and cultural center of the region. The Danube river runs through the city and separates two towns, Petrovaradin and Sremska Kamenica, from the rest of the city. On the cliff over the river stands the Petrovaradin fortress, which was built in the 18th century and, luckily, has never been used. Now, it is a complex of parks, museums and art galleries as well as hotels, restaurants, cafeterias and clubs.

There is a small mountain (600 m high) called "Fruska gora", in the



south of the city. The lovely nature of the national park, the numerous monasteries, as well as the small towns and villages

make it a perfect place for spending your weekend.

Novi Sad is a city that never sleeps. It has a very rich social and cultural life during both work days and weekends. A couple of cinemas and theaters, as well as dozens of restaurants, cafeterias and clubs offer various types of entertainment.

Every year, at the beginning of July, the "Exit Noise Summer Fest" is held in Novi Sad. It is the biggest music festival in southeastern Europe. Some 200,000 to 300,000 people from all over the region and the rest of Europe, as well, visit it. It is located at the Petrovaradin fortress, whose huge complex allows different happenings to take place at the same time: theater and cinema, concerts, youth forums... This festival shows the energy of the region's youth.

The medical faculty at the University of Novi Sad was founded in 1960, and currently it has 3,000 students studying medicine and dentistry there. The dental studies are organized in a five-year program for 600 students. It has basic pre-clinical and clinical subjects in general medicine (O.R.L., dermatology, internal medicine, etc.) adjusted to the needs of the future dentist as a medical worker. The dental subjects are also organized as pre-clinical and clinical ones. Among the clinical subjects, there are: oral pathology (with periodontology and stomatology), tooth pathology (with endodontics and cariology), prosthetics (removable and fixed), oral surgery, pediatric dentistry and preventive dentistry.

Clinical work is done in the dental clinic, which has separate departments for each dental clinical subject. Unfortunately, because of the bad oral hygiene of our people, there



is no lack of patients, especially in cariology, endodontics and oral surgery (tooth extraction).

It should be emphasized that the dental studies in Novi Sad are based on a great deal of theoretical work, both in dental field and general medicine. The connection between systemic diseases and oral and tooth pathology is of special importance for us. This is derived from the fact that the human body is a complicated system and the oral cavity cannot be treated separately from the rest of the body. That's why we are medical doctors as well as dentists.

In the field of practice, we try to gain knowledge and skills required to work as a general practitioner (GP). We perform numerous caries and endodontic treatments, tooth extractions, plaque removal and other preventive treatments. On the other hand, in orthodontics, oral surgery, removable and fixed prosthetics, we learn basics.

After finishing the dental studies in Novi Sad, we have a solid basis upon which to work as a GP or to develop our knowledge in various specializations or post-graduate studies.

So, if you would like to have practice and fun during the summer, Novi Sad welcomes you!

Nebojsa Djuric EDSA delegate Medical Faculty of Novi Sad SERBIA & MONTENEGRO



HELLO FROM GEORGIA...!

Dear friends,

I'm a 5th year student at the dental faculty of Tbilisi State Medical University, as well as the EDSA delegate.

Tbilisi State Medical University is the center of the Georgian Medical Sciences. At present, the University includes 9 faculties, a college, 63 departments, the Scientific Research Institute, 2 clinics, and 3 outpatient stomatological clinics. The students total 4400, and 200 of them are from other countries. There are postgraduate courses for dental students in prosthodontics, endodontics, conservative dentistry, oral surgery, periodontology and pediatric dentistry. The studying system is oriented towards the European one and last year the TSMU adopted the "European Credit-Transfer System" (ECTS). More particularly, the students take part in the process of studying reforms. Furthermore, while our faculty was adopting ECTS, we organized a conference and thoroughly deliberated over that method of learning. We also made our reports about the system available, in order to discuss them with our professors. Nowadays, the system is being successfully used.

The TSMU students are often the initiators and founders of various projects and activities, such as the Georgian medical and dental students' scientific congresses, the Georgian Medical Students' Association and others. The students' last annual national scientific congress was held in May 2003 at TSMU. The



TSMU students are currently members of IFMSA, EMSA, EPSA, IADS and EDSA.

We often organize cultural activities, such as excursions to Georgian resorts or historical places. We have our chorus, the Club of the Cheerful and the Resourceful (CCR), the alpinism club and some permanent activities in various areas. You never have enough time to participate in all these activities, so you can choose one of them and then change your choice if you want. ECTS of TSMU takes all these activities into account and defines the credits that will be given for them.

It is important to mention that the TSMU students also established the Georgian Stomatological Students' Association (GSSA) in January 2002. There are 400 members in our association. The main direction of the association is the realization of dental students' intellectual, cultural and professional potentials. The GSSA organize all the aforementioned activities for dental students, and the achievement of the goals is facilitated through the cooperation with EDSA. The new EDSA projects have been announced on our website as well as in our students' magazine. The

GSSA is interested in collaboration with foreign students' organizations and that's why we contacted EDSA.

In September 2002, I participated in the EDSA General Assembly (GA) of the 30th meeting in Slovenia. The organization was of high level, thanks to our Slovenian colleagues. The GSSA expectations about EDSA were justified. EDSA is a serious organization and we are ready to cooperate in all the EDSA projects. Among all, we are especially interested in the EDSA students' exchange project (EVP) that is being planned.

The EDSA meetings are the most effective and entertaining way of learning more about dentistry in the world. You are also given the chance to relax with your foreign friends in a country you had never visited before. Indeed, such cooperation is the best opportunity to learn the world through your profession – dentistry.

Irakli Dzigua GSSA President EDSA delegate Tbilisi, GEORGIA

EDSA Researchers

TISSUE ENGINEERING

"Tissue engineering" is a relatively new, highly promising field of reconstructive biology. It is a term originally used to describe tissue produced in culture by cells grown in various porous absorbable matrices.

Healing of tissues proceeds either by repair or regeneration. The result of the repair process is a fibrous scar, whereas the final product of regeneration is tissue with characteristics indistinguishable from the original material. By combining three key elements – scaffolds (matrices), cells and signal molecules (growth factors) – tissue regeneration can often be accomplished.

Matrices

These include various extracellular matrix components, alone or in combination (different collagens, fibrin, fibronectin, hyaluronic acids, glycosaminoglycans), ceramics (hydroxyapatites, tricalcium phosphates), synthetic polymers (particulary polylactic and polyglycolic acid polymers) and bone grafts (bone autograft and allograft).

A matrix can play several roles during the process of regeneration in vivo:

- reinforce the defect site, so as to maintain the shape of the defect and prevent distortion of surrounding tisssue
- serve as a barrier to the ingrowth of surrounding tissue that may impede the process of regeneration
- serve as a scaffold for migration and proliferation of cells in vivo or for cells seeded in vitro
- serve as an insoluble regulator of cell function through its interaction with certain integrins and other cell receptors.

Cells

In many tissues, such as bone, the number and mitotic activity of precursor cells are so high that there is normally an ample source of endogenous cells to populate implanted scaffolds for the regeneration of tissue. Exogenous cells and mitotic factors may only be necessary in special cases in these tissues, when the proliferation of the precursor cells is impeded or their pool has been greatly diminished by previous surgery or concomitant disease.

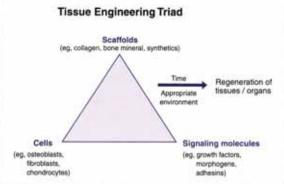
When allogeneic cells are used, the potential for immune response and disease transmission must be considered. Issues related to the use of autologous cells include the requirements for harvesting the cells and donor site morbidity. A few years ago, it was proposed that marrow stromal stem cells can be used as precursors for many connective tissues.

Signaling molecules

Injected alone or bound to a biomaterial used as the delivery system, they have been investigated to stimulate division of neighboring cells and those infiltrating the defect, to stimulate the differentiation of certain cells along a specified pathway (ie, differentiation factors such as bone morphogenetic proteins), to stimulate angiogenesis and to serve as chemoattractants for specific cell types.

BMPs (Bone Morphogenetic Proteins)

They are natural glycoproteins and members of the transforming growth factor- β (TGF- β) superfamily. They act at all important steps in the cascade of events that form new bone:



Tissue engineering generally combines three key elements: scatfolds (matrices), signaling molecules (growth factors), and cells. By combining these elements, tissue regeneration can often be accomplished.

> chemotaxis of progenitor cells, mitosis, differentiation and proliferation of chondrocytes and osteoblasts. Althought BMPs were originally isolated and identified from bone, it was soon discoverad by a variety of studies that BMPs are expressed in most other tissues of the human body. Also, during embryogenesis they serve as important inductive signals in development of the musculoskeletal system, the nervous system, the heart, kidney, skin, eves and teeth, After birth, they play roles in tissue repair and regeneration.

> BMPs have proven to be an important new area of developmental biology and have clearly become an important new tool in the field of tissue engineering.

Conclusion

Tissue engineering holds the promise of solving a number of compelling clinical problems in dentistry that have not been adequately addressed through the use of permanent replacement devices. The challenge will be to select the optimal combination of matrix, cells and soluble regulators for a particular clinical problem.

References

Vukicevic S., Sampath KT. Bone Morphogenetic Proteins – From Laboratory to Clinical Practice. Birkhauser Verlag, 2002.

Lynch SE., Genco RJ., Marx RE. Tissue Engineering. 1st ed. Quintessence Publishing Co., Chicago, 1999.

Nikolina Trupeljak EDSA delegate Zagreb, CROATIA