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Dear Colleagues

We welcome you to the Fourth European-American School in Forensic Genetics and Mayo Clinic Course in Advanced Molecular and Cellular Medicine in Dubrovnik, Croatia, September 5-9, 2005. The event will feature the latest advances in forensic and clinical genetics and related areas. Just as importantly, it will be a forum for exchange of pertinent information, ideas and technical developments in the form of lectures, a technical hands-on workshop, round-table discussions and poster presentations.

The previous meetings in Split (1997), Dubrovnik (2001) and Zagreb (2003) were highly successful. With participants from more than 60 countries these events were truly international. The registration for this meeting attests to the continuing international interest in this program.

This meeting in Dubrovnik offers cutting-edge scientific contents enriched by the ethereal beauty of the historic town on the pristine Adriatic. Dubrovnik is the heir of an extraordinary tradition that begot major achievements in science, medicine, literature, music and visual arts. We are certain that you will be inspired by the city also known as the Pearl of the Adriatic.

The programs in forensic medicine and molecular and cellular medicine will run in parallel with the inaugural, methods and closing sessions held jointly. In keeping with tradition, this year the Program Committee bestowed four Young Investigator Awards. The winners will present their work at the special plenary session on the last day of the meeting.

In addition, on September 5 we will hold the first assembly of the newly founded International Society for Applied Biological Sciences (ISABS; www.isabs.hr) to discuss and adopt the bylaws and elect officers. The goal of ISABS is to promote development of disciplines combining clinical medicine, molecular genetics and medicine, forensic sciences and biotechnology. We hope you will find it worthwhile to join us in this endeavor.

As in previous years, the Croatian Medical Journal is the official journal of the meeting. The issue for August 2005 (Vol. 6, No. 4) is dedicated to our meeting and contains many pertinent papers. We believe that the proceedings of this conference will be accepted as well as have the proceedings of our past events. These have been widely accepted as documented by more than 70,000 hits at the CMJ web page (www.cmj.hr) and the high citation rate of the papers published therein.

We look forward to your participation and your scientific contribution.

Sincerely,

Moses Schanfield, Ph.D.
Dragan Primorac, M.D., Ph.D.
Stanimir Vuk-Pavlović, Ph.D.

Conference/Program Directors

CONFERENCE ORGANIZER

Program Directors

Moses Schanfield, George Washington University, Washington, DC, USA
Dragan Primorac, University of Split, Split and Josip Juraj Strossmayer University, Osijek, Croatia
Stanimir Vuk-Pavlović, Mayo Clinic College of Medicine, Rochester, MN, USA
(Executive director for this conference)

Organizers

International Society of Applied Biological Sciences
Mayo Clinic College of Medicine and University of Zagreb International Program in Advanced Medical Education

Standing Committee of the Mayo Clinic College of Medicine—University of Zagreb International Program in Advanced Medical Education

Stanimir Vuk-Pavlović, Ph.D., Chair
Nada Cikeš, M.D., Ph.D.
John La Forgia, M.B.A.
Nijaz Hadžić, M.D. Ph.D.
Thomas McDonald, M.D.
Dragan Primorac, M.D., Ph.D.
Mark Wilhelm, M.D.

Program Committee

Christopher Asplen (Smith Alling Lane, LLC, Washington, DC)
Frederick Bieber (Harvard Medical School, Boston, Massachusetts)
Mitchell Holland (The Bode Technology Group, Springfield, Virginia, USA)
Doron Lancet (Weizmann Institute of Science, Rehovot, Israel)
Henry Lee (University of New Haven, West Haven, Connecticut)
Timothy Palmbach (University of New Haven, West Haven, Connecticut)
Jeffrey Platt (Mayo Clinic College of Medicine, Rochester, Minnesota), Chair
Gregory Poland (Mayo Clinic College of Medicine, Rochester, Minnesota)
Dragan Primorac (University of Split, Split, Croatia and University of Osijek, Osijek, Croatia)
Moses Schanfield (George Washington University, Washington, DC)
David I. Smith (Mayo Clinic College of Medicine, Rochester, Minnesota)
Stanimir Vuk-Pavlović (Mayo Clinic College of Medicine, Rochester, Minnesota)

Scientific Advisory Committee

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Boro Dropulić
Hanns-Georg Klein
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Stephen Lupton
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Inga Marijanović
Damir Marjanović (Bosnia and Herzegovina)
Frane Paić
Petar Projić
Ivana Šamija
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Andrea Tomljenović

Congress Service

Adriatic Luxury Services
Kardinala Stepinca 21
20 000 Dubrovnik
Croatia

Phone: +385 20 437 284
Fax: +385 20 437 289
e-mail: als@als.hr
<http://www.als.hr>

Scientific Program Information.

Certificate of Attendance

Certificates of attendance will be available at the registration desk.

Young Investigator Awards

Members of the Program Committee selected abstracts among entries submitted by investigators under the age of 40. Author(s) of each selected abstract will receive the Young Investigator Award Certificate and EUR500 and will present their work from the podium at the special plenary session on September 9.

Credits

The 4th European-American School in Forensic Genetics and Mayo Clinic Course in Advanced Molecular and Cellular Medicine has been approved for 20 credit points (participants) or 25 credit points (lecturers) by the Croatian Medical Chamber.

Sponsor Exhibition opening hours

Set up: Sunday, September 4, 2005 18:00 to 20:00
Monday, September 5, 2005 noon to 18:00
Tuesday, September 6, 2005 08:30 to 20:00
Thursday, September 8, 2005 08:30 to 20:00
Dismantling: Friday, September 9, 2005 18:00 to 20:00

Language

The official language of the conference is English (no simultaneous translation)

Poster Setup

Tuesday, September 6, 2005, 07:30 to 08.30
Poster board numbers can be found in the author's index. The staff at the poster Presenter's Desk will help you in finding both the number and location of the board.

Poster Exhibits

Tuesday, September 6, 2005 08:30 to 20:00
Thursday, September 8 2005 08:30 to 19:00

Poster Discussion with wine and cheese reception

Tuesday, September 6, 2005 19:00 to 20:00
Thursday, September 8 2005 18:00 to 19:00
If you or a co-author will not be able to be at your board at this time, please leave a note on your poster stating date and time when you will be present.

Poster Removal

Thursday, September 8 2005 19:30 to 20:30

Program Changes

The organizers cannot assume liability for any changes in the program due to external or unforeseen circumstances.

Registration Desk Opening Hours

Sunday, September 4, 2005 16:00 to 20:00
Monday, September 5, 2005 07:30 to 20:00
Tuesday, September 6, 2005 07:30 to 16:00
Thursday, September 8, 2005 07:30 to 16:00

Slide and PowerPoint Preview Room

A slide and PowerPoint preview room will be available to all speakers. We encourage all lecturers to present data as a PowerPoint presentation.

Recipients of the 2001 Young Investigator Awards

Forensic Identity Testing: Frontiers in Molecular and Cellular Medicine:

Lucia Cifuentes Ovalle, Chile
Rima Dada, India
Karja Drobnič, Slovenia
Anna Gareeva, Russia
Nguyen Hoai Giang, Vietnam
Tomasz Kupiec, Poland

Recipients of the 2003 Young Investigator Awards

Robert J. Shelton, CO, USA (Forensic Genetics)
Chiara Magri, Italy (Molecular and Cellular Medicine)

Recipients of the 2005 Young Investigator Awards

Caroline Round, United Kingdom (Forensic Genetics)
Tracy Johnson, USA (Forensic Genetics)
Vedrana Montana, USA (Molecular and Cellular Medicine)
Mirela Baus Lončar, Germany (Molecular and Cellular Medicine)

General Information

Badges

Name badge is required to participate in scientific sessions, exhibitions and poster viewing. Badges will be provided to participants, accompanying persons and exhibitors at registration. Please wear your badge at all events at the conference venue. Handling fee for replacement badges is €10.

Bank Services

The official currency in Croatia is the Croatian kuna (HRK). The official exchange rates:

1 EUR = 7.37 HRK* (August 24, 2005)

1 USD = 6.02 HRK* (August 24, 2005)

* Please note that these exchange rates are variable

Business hours for post offices and banks

Post offices and banks are generally open for business from 8:00 a.m. to 7:00 p.m., Monday through Friday.

Cash Machines

ATMs accepting all major bank cards and credit cards are located at numerous sites in Dubrovnik.

Electricity Supply

220-240 V, 50 Hz

Insurance

Participants are encouraged to make their own arrangements pertinent to health and travel. By registering for the 4th European-American School in Forensic Genetics and Mayo Clinic Course in Advanced Molecular and Cellular Medicine, Dubrovnik, Croatia, September 5–9, 2005, participants accept that neither the organizers and its agents nor the sponsors and exhibitors nor the Adriatic Luxury Services assume any liability whatsoever.

Message Center

A Message Center is available at the registration desk.

Official Carrier

Croatian Airlines is the official carrier of the Conference. Croatia Airlines is offering a 50% discount on international flights on individual published IATA airfares and a 25% discount on domestic flights on C, Y and B airfares to Dubrovnik for the event participants and accompanying persons. This discount is applicable for Croatia Airlines flights only, on tickets purchased at the Croatia Airlines offices and agents. The discount pertains to travel from 29 Aug to 16 Sep 2005. To obtain the discount, Croatia Airlines discount voucher and a confirmed registration form or other written proof of participation must be presented at the time of purchase. If you would like to take advantage of this special offer, please contact your nearest Croatia Airlines office. The list of Croatia Airlines offices, as well as the discount voucher and all information concerning granted discount can be found at www.croatiaairlines.com – at your service – official carrier.

Public Transportation in Dubrovnik

Buses are the main means of public transportation in Dubrovnik. Almost all hotels have easy access to buses.

Restaurants

Most restaurants in Dubrovnik are opened from 8:00 a.m. to 11:00 p.m. Service charges are included in the price, unless explicitly mentioned otherwise, but an additional tip of 5 to 10 percent is expected. Some restaurants may have a cover charge.

Service Center

Photocopying, typing, production of overhead transparencies and computer print-outs are available at the Dubrovnik Palace Hotel Service Center for a fee.

Shopping

Store hours in Dubrovnik are usually 8:00 a.m. – 9:00 p.m. Monday to Saturday. Some are open on Sundays. Most shops accept all major credit cards.

Smoking Policy

The 4th European-American School in Forensic Genetics and Mayo Clinic Course in Advanced Molecular and Cellular Medicine is a non-smoking event. Smoking is prohibited everywhere on conference grounds and at all functions associated with the conference.

Special requirements

Registrants with special requirements for physical communication and dietary requirements should contact Adriatic Luxury Services, official congress service agency in advance.

Information

Conference staff will be pleased to help you with any conference and travel information you may need.

Taxi

Numerous taxi stands are located throughout Dubrovnik city centre and in front of the hotels. Please address questions regarding taxi transportation to the concierge at your hotel.

Hotel Information

Dubrovnik Palace Hotel resides on the beautiful Lapad peninsula, a short drive from the historic city walls of Dubrovnik. Surrounded by lush green pine trees, the Hotel enjoys a spectacular coastal position overlooking the sea. This five star luxury hotel is isolated from the urban turbulence and is ideally located to meet guests that seek privacy and relaxation. Facilities in standard and superior rooms include: en-suite bathroom with guest bathrobes and slippers, balcony with sea view, flat screen satellite TV with internet, air-conditioning, mini bar, direct dial telephone, work desk and safe deposit box.

Services: indoor swimming pool, 2 indoor jacuzzi pools, fitness club, relaxation terrace, beauty treatment rooms.

Access to the walls of the Old City of Dubrovnik from the hotel is a matter of a few minutes by car, bus or taxi. In the summer days you can take the boat directly from the hotel's own quay to take you to the old port.

Distances:

- from Dubrovnik int. airport: 25 km (cca 25 minutes)
- from Old Town 4,5 km (few minutes by car, bus, taxi or boat)
- from the sea: few meters
- from the beach: has its own beach
- from the bus station: 4 km
- from the harbour: 4 km

Transportation to/from Hotel-Airport

- Time by taxi: approx. 25-30 minutes
- Cost by taxi: approx. 250,00- 280,00 kn (one way)
- Cost by hotel limousine: approx. 270,00 kn (one way)
- Time by bus: approx. 45 minutes
- Cost by bus: approx. 25,00 kn

For additional information about hotel please check: <http://www.dubrovnikpalace.hr>

Congress tour

Wednesday, September 7, 2005

A guided boat trip to Elaphite Islands

Price per person: EUR 40 (Transfer, guide, local drink aboard, lunch and entrance fees)

Menu: fish, meat, vegetables, wine and juice.

Duration: half day

The Elaphite Islands can be seen from Dubrovnik. They are the uninhabited Daksa, Sv. Andrija, Ruda, Jakljan, Tajan and Olipa and the inhabited Koločep, Lopud and Šipan. A welcome drink will be served en route to Koločep where we will make a short sightseeing stop. Buffet lunch will be served while sailing to Lopud where we will visit the 15th-century church of St. Mary and enjoy some leisure time before returning to Dubrovnik in preparation for the evening academic program and conference dinner.

SPEAKERS

Advanced Forensic Genetics in Fighting Crime and Biodefense

- **Antonio Alonso** (*National Institute of Toxicology and Forensic Sciences, Madrid, Spain*)
 - **Christopher Asplen** (*Smith Alling Lane, LLC, Washington, DC, USA*)
 - ***Frederick Bieber** (*Harvard Medical School, Boston, Massachusetts, USA*)
 - ***Zoran Budimlija** (*Office of Chief Medical Examiner, New York, New York, USA*)
 - ***Theresa Caragine** (*Office of Chief Medical Examiner, New York, New York, USA*)
 - **Heather Miller Coyle** (*Connecticut State Police, Meriden, Connecticut, USA*)
 - ***Cecelia Crouse** (*Palm Beach Sheriff's Office, Palm Beach, Florida, USA*)
 - ***Dora Gransden** (*Promega, Madison, Wisconsin, USA*)
 - **Joy Halverson** (*QuestGen Forensics, Davis, California, USA*)
 - **Jürgen Henke** (*Institut für Blutgruppenforschung, Cologne, Germany*)
 - **Mitchell Holland** (*Forensic DNA Consultants, Manassas, Virginia, USA*)
 - **Edwin Huffine** (*Bode Technology Group, Springfield, Virginia, USA*)
 - **Susan Jones** (*US Armed Forces Institute of Pathology, Washington, DC, USA*)
 - **Demris Lee** (*Armed Forces DNA Identification Laboratory, Rockville, Maryland, USA*)
 - ***Henry Lee** (*University of New Haven, West Haven, Connecticut, USA*)
 - ***José Lorente** (*University of Granada, Granada, Spain*)
 - ***Stephen Morse** (*Center for Disease Control and Prevention, Atlanta, Georgia, USA*)
 - **Garth Nicolson** (*Institute for Molecular Medicine, Huntington Beach, California, USA*)
 - ***Nicola Oldroyd** (*Applied Biosystems, Warrington, United Kingdom*)
 - ***Vladimir Parpura** (*University of California, Riverside, California, USA*)
 - **Thomas Parsons** (*Armed Forces DNA Identification Laboratory, Rockville, Maryland, USA*)
 - ***Gregory Poland** (*Mayo Clinic College of Medicine, Rochester, Minnesota, USA*)
 - **Dragan Primorac** (*University of Split, Split, Croatia and University of Osijek, Osijek, Croatia*)
 - **Ronald Reinstein** (*Supervising Criminal Court, Maricopa County, Arizona, USA*)
 - **Moses Schanfield** (*George Washington University, Washington, DC, USA*)
 - **Debbie Smith** (*Williamsburg, Virginia, USA*)
 - **Paula Hoffman Wulff** (*American Prosecutors' Research Institute, Alexandria, Virginia, USA*)
-
- ***Joint session speaker**

Advances in Molecular and Cellular Medicine

- **Charles Auffray** (CNRS, Villejuif, France)
- **Allan Dietz** (Mayo Clinic College of Medicine, Rochester, Minnesota, USA)
- **Henry Erlich** (Roche Molecular Systems, Alameda, California, USA)
- **Michael Frank** (Duke University, Durham, North Carolina, USA)
- **Eli Gilboa** (Duke University, Durham, North Carolina, USA)
- ***Michael Hammer** (University of Arizona, Tucson, Arizona, USA)
- **David James** (Mayo Clinic College of Medicine, Rochester, Minnesota, USA)
- ***Robert Huber** (Nobel Laureate 1988, Max Planck Institute for Biochemistry, Martinsried, Germany, USA)
- **Doron Lancet** (Weizmann Institute of Science, Rehovot, Israel)
- **Hans Lehrach** (Max Planck Institute for Molecular Genetics, Berlin, Germany)
- ***Alemlka Markotić** (Institute of Immunology, Zagreb, Croatia)
- **Brenda Ogle** (Mayo Clinic College of Medicine, Rochester, Minnesota, USA)
- **Jeffrey Platt** (Mayo Clinic College of Medicine, Rochester, Minnesota, USA)
- **Yair Reisner** (Weizmann Institute of Science, Rehovot, Israel)
- ***Pavao Rudan** (University of Zagreb, Zagreb, Croatia)
- **David I. Smith** (Mayo Clinic College of Medicine, Rochester, Minnesota, USA)
- ***Davor Solter** (Max Planck Institute for Developmental Biology, Freiburg, Germany)
- **Igor Štagljar** (University of Toronto, Toronto, Ontario, Canada)
- ***Mark Stoneking** (Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany)
- **Raimo Tanzi** (Applied Biosystems, Monza, Italy)
- **Andre Terzic** (Mayo Clinic College of Medicine, Rochester, Minnesota, USA)
- **Stanimir Vuk-Pavlović** (Mayo Clinic College of Medicine, Rochester, Minnesota, USA)

***Joint session speaker**

THE 4TH EUROPEAN-AMERICAN SCHOOL
IN FORENSIC GENETICS AND
MAYO CLINIC COURSE IN ADVANCED
MOLECULAR AND CELLULAR MEDICINE

Dubrovnik Palace Hotel
Dubrovnik
Croatia
September 5-9, 2005

SCIENTIFIC PROGRAM

Presentation number: M26

MODULATION OF THE RIBAVIRIN INDUCED CYTOTOXICITY IN HARVESTED HUMAN LYMPHOCYTES IN VITRO

Leskovac A,¹ Joksić I,² Petrović S,¹ Joksić G.¹

¹Vinca Institute of Nuclear Sciences, Belgrade; ²School of Medicine, University of Belgrade, Belgrade, Serbia and Montenegro
andreja@vin.bg.ac.yu

The present investigation was undertaken to evaluate effect of vitamin B12 on ribavirin induced cytotoxicity in phytohemagglutinin-stimulated human lymphocytes. Blood samples, obtained from healthy volunteers (males, aged 31 years, non-smokers) are used for examination. Blood cells were treated with increasing doses of ribavirin: 0.05, 0.17, 0.32, 0.47 and 0.65 $\mu\text{mol/ml}$ at three different incubation times: 2, 4 and 17 hours. Duplicate ribavirin treated cultures were supplemented with 50 μl of B12 during the drug treatment. Supplementation with B12 lowers the MN frequency and slightly recovers the proliferation potential of treated cells in each treatment period of time except for the highest concentration and the longest treatment. Presence of ribavirin during entire S phase of the cell cycle strongly blocks cell cycle progression. This study have shown that B12 posses unique beneficial effects in reducing the toxic effects of ribavirin. Mechanism of beneficial effects of ribavirin should be examined further.