

# XII INTERNATIONAL CONFERENCE ON HEMORHEOLOGY AND MICROCIRCULATION

**1–3 July 2019  
Yaroslavl, Russia**

INTERNATIONAL SOCIETY OF CLINICAL HEMORHEOLOGY (ISCH)  
RUSSIAN SOCIETY OF HEMORHEOLOGY AND MICROCIRCULATION  
MOSCOW STATE UNIVERSITY  
YAROSLAVL STATE PEDAGOGICAL UNIVERSITY  
YAROSLAVL STATE MEDICAL ACADEMY

*Dear Colleague,*

The Organizing Committee invites you to attend the 12-th International Conference on Hemorheology and Microcirculation that will be held on 1-3 July, 2019 in center of Russia, in the ancient Russian town Yaroslavl that is situated on the great river Volga and is part of the cities of the "Golden Ring of Russia". This is a city where the history of Russia comes to life. Its face bears traces of different times and epochs, white walls of old churches stand out against the greenery of numerous trees. Yaroslavl attracts tourists as a city of rich artistic heritage passing a lot of specimens of old architecture and painting. Magnificent views open from the steep banks of the rivers Volga and Kotorosl.

*A.V. Muravyov*  
*Chairman of Organizing Committee*



## **Organizing Committee:**

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## **Conference Secretariat** (Registration, Accommodation etc.)

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## **GENERAL INFORMATION**

### **Date and venue**

From Monday, July 1 to Wednesday, July 3 at:

Pedagogical University, Kotorosl'naya str. 46v, Yaroslavl, Russia

### **Official Language**

Russian and English

### **MAIN SCIENTIFIC TOPICS**

- Molecular change mechanisms of the blood cell microrheological control
- Hemorheology, Hemostasis and Microcirculation under normal and pathological conditions
- Circulatory system: systemic hemodynamics, organ blood flow, microcirculation and blood rheology
- Hemorheology, microcirculation and hemostasis in the surgical treatment of cancer patients
- Hemorheology, microcirculation and hemostasis in the chemotherapy of cancer patients
- Laser Doppler Flowmetry and tissue oxygenation: clinical and experimental researches
- Adaptation, stress and physical activity: the role of the microcirculatory and hemorheology

- change mechanisms
- Regulatory mechanisms and microrheological properties of blood cells and endothelial functions
- Hemorheological disorders in the clinic of cardiovascular, cerebrovascular, renal and pulmonary diseases
- Red blood cell aggregation and deformation: clinical applications
- Therapeutic haemapheresis, transfusion and hemorheology
- Methodology and instruments
- Miscellaneous

### **Plenary lectures**

Intended to give a broad view of special leading subjects and to orient for future research. Each will be allocated 30 minutes. No questions will be allowed following the plenary lectures

### **Oral presentation**

Selected abstracts will be presented in sessions of **15 min**. Each oral communication session will include 6 to 8 oral presentations, plus one invited lecture of related topic. The organization anticipates that most of the oral communications will be selected from poster presentations.

### **Poster presentation**

Certain topics are more suitable to be presented in form of a poster allowing for ample discussion. Possibilities to discuss posters will include poster sessions.

### **Registration details**

Registration is required for all participants and accompanying persons (Includes admission to reception, coffee breaks, bus transfer to official events, abstract booklet)

**Registration fees:** not charged

**Accompanying persons:** free registration

### **Abstracts presentation**

The entire abstract must not exceed 350 words, including title, names of authors (underline name of presenting author), and institution (s)

- Use a white sheet of paper (A4) not to be folded for mailing
- The title should be all in capital letters, except formulae
- A structured form is required: Use the headings (if pertinent): BACKGROUND, OBJECTIVE, MATERIAL/METHODS, RESULTS, CONCLUSION, typed in capital letters.

## Sample abstracts

### **BLOOD RHEOLOGY ABNORMALITIES AND VASCULAR CELL ADHESIONS MECHANISMS IN SICKLE CELL TRAIT CARRIERS DURING EXERCISE**

Philippe Connes<sup>1</sup>, Olivier Hue<sup>1</sup>, Julien Tripette<sup>1,2</sup> and Marie-Dominique Hardy-Dessources<sup>2</sup>

<sup>1</sup>Laboratoire ACTES (EA 3596), Département de Physiologie, University des Antilles et de la Guyane, Guadeloupe, pconnes@yahoo.fr – UMR-Inserm U763/University des Antilles et de la Guyane, Pointe-a-Pitre, Guadeloupe, F-97159 France.

**Background.** Sickle cell trait (SCT) is usually considered a benign disorder compared with sickle cell anemia (SS hemoglobinopathy). However, several authors reported cases of exercise-related sudden death in this population. Among mechanisms that could be involved in these fatal complications, those involved in the vasoocclusive processes of SS hemoglobinopathy could play a role. Therefore, we have developed different studies in order to assess the effects of exercise on biological parameters potentially involved in the vaso-occlusive processes.

**Methods.** We have compared the kinetics of red blood (RBC) rigidity at rest, during a prolonged and intense exercise, and during the immediate and late recovery between a group of SCT carriers and a control group.

**Results.** We found that RBC rigidity increased above resting values in the two groups 24 and 48 hrs after exercise but the increase was greater in SCT carriers. In addition, we have followed the kinetics of several adhesion molecules in response to three repeated maximal ramp exercise tests. Molecules such as the vascular cell adhesion molecule (VCAM-1), which plays a role in the firm adhesion of reticulocytes to endothelial cells, and L-selectin which plays a role in leucocyte rolling on vascular wall, have been tested. Although VCAM-1 was not different between the two groups and remained unchanged with exercise, we found an increase in L-selectin in the two groups and this increase was faster in SCT carriers compared to a control group. L-selectin increased above basal values 24 hrs after the end of exercise in the control group whereas, this increase was observed immediately at the end of exercise in SCT carriers.

**In conclusion,** we can suggest that the risks for micro vascular complications in SCT carriers in response to exercise could be dependent on changes in blood rheology and vascular adhesion processes.

## Deadline for abstract submission is 31th May 2019

### **Accommodation**

Accommodation in various price categories has been reserved through Yaroslavl Tourism for congress participants: [www.booking.com](http://www.booking.com)

You will find a list of all reserved hotels as well as their rates and location.

## **Yaroslavl location**

Yaroslavl is situated 250 km from Moscow (in North direction) and it can be reached by train or bus. Useful information about train trip to Yaroslavl could be found here: <http://www.poezda.net/en/index> or [www.tu.tu.ru](http://www.tu.tu.ru)

## **Commercial Exhibition**

Commercial firms will form an interesting exhibition which gives all participants the possibility to get informed on drugs, laboratory tools and many more. The exhibition will be open during all two days of the meeting.

## **Weather and clothing**

The weather in Yaroslavl in June usually warm. Temperatures range: from 22-24<sup>0</sup> C. Clothing is informal for all occasions.

## **Attendance Certificates**

Certificate of Attendance will be available from the Congress Secretariat on request.

## **Currency and Banking**

The currency in Russia is the Russian ruble. One Euro corresponds to 78.0 rubles\*; one dollar corresponds to 66.0 rubles\*. Money can be easily exchanged at banks and exchange offices, travel agencies and hotels.

*\* Average exchange rate in February 2019 and subject to change*

## **Credit cards**

All major credit cards, such as MasterCard – Eurocard, Visa, American Express etc. are accepted in banks, hotels and shops.

Please note that identification (passport) is requested when exchanging money. All banks in Russia are authorized to convert foreign currency to Russian ruble.

## **Electricity**

Main voltage in Russia is 220 V at 50 Hz. Electric sockets only accept round-prong plugs.

## **Taxi**

A taxi service in Yaroslavl is available day and night.

## **Liability and insurance**

The organizing committee accepts no liability for personal injuries or for loss /damage of property belonging to congress participants, either during or as a result of the congress or during any of the excursion tours. It is recommended that participants arrange for their own personal health, accident and travel insurance.

**Passport and visas**

For visitors from all countries, it is recommended to check document requirements with the Russian embassy or consulate in their country of residence. Delegates requiring a letter of invitation for visa purposes are kindly requested to write to the congress organizers.

**Note:** The organizing committee of the conference and the co-organizer of the event, the travel company MBS-Tour, will provide visa support in the form of a special voucher, which will allow you to receive an entry visa to Russia at the Russian consulate or embassy in your country.

**Telephone**

The country code for Russia is **007**; the area code for Yaroslavl is **4852**.

**Public telephones**

So called «taxcards» for public telephones are sold at post offices, train stations or at any newsstand. Operating instructions are displayed in the telephone booths, which can be found at post offices and in various other locations.

**Mobile telephones**

Contact your provider for any additional information on the operation of your mobile telephone abroad. Please note that you might need an adapter for recharging in Russia and that mobile telephones must be switched off during congress sessions.

**Social events****Excursion around Yaroslavl** (it's free)

Tuesday, July 2: 14.00 - 17.30.

**Welcome party** (Yaroslavl, Kotorosl'naya st. 46B)

Monday, July 1: 18.00 - 20.30

**Conference banquet**

Tuesday, July 2: 19.00 - 22.00