

# **VIII PARNAS CONFERENCE**

## **PROGRAMME**

Warsaw, Poland  
August 27 – 31, 2011



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Polish Biochemical Society

Ukrainian Biochemical Society

Israel Society for Biochemistry and Molecular Biology

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International Institute of Molecular and Cell Biology, Prof. Jacek Kuźnicki, Director

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University of Wrocław, Prof. Marek Bojarski, Rector



Main Supporting Institution



Supported within 3+ Meeting Programme



The Conference was supported by the EU FP7 Project BIO-IMAGINE:  
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Dear Participants,

## WELCOME TO VIII PARNAS CONFERENCE

We cordially invite you to participate in the 8<sup>th</sup> Parnas Conference organized by the Polish Biochemical Society, Ukrainian Biochemical Society and Israel Society for Biochemistry and Molecular Biology.

Parnas Conferences commemorate the world known Polish biochemist **Jakub Karol Parnas**. Before the WWII, J.K. Parnas was a professor of physiological chemistry at University in Lwów (in Polish) or Lviv (in Ukrainian) or Lemberg (in Yiddish). The Parnas' laboratory was a unique place where in a friendly atmosphere young Polish, Ukrainian and Jewish scientists had studied glucose metabolism. The results of their work were highly appreciated as for many years glycolysis was also termed as Embden-Meyerhof-Parnas pathway.

The first Parnas Conference was organized in 1996 in Lviv by the Ukrainian and Polish Societies, and since then every two years the Conferences have been organized alternately in Poland and in Ukraine. The coming 8<sup>th</sup> Parnas Conference will be organized for the first time by the Polish, Ukrainian and Israel biochemists in Warsaw.

Welcome to Warsaw to meet in a friendly atmosphere, we hope reminding that of the Parnas' laboratory.

**Andrzej Dżugaj**

*President of the Polish Biochemical Society*

**Serhiy Komisarenko**

*President of the Ukrainian Biochemical Society*

**Michael Eisenbach**

*President of the Israel Society for Biochemistry and Molecular Biology*

Warsaw, August 27<sup>th</sup> 2011.

## GENERAL INFORMATION

### CONFERENCE VENUE

**VIII Parnas Conference will take place at the Faculty of Biology of the Warsaw University, located at the Warsaw Ochota Campus.**

**Faculty of Biology, Warsaw University, 1 Miecznikowa Street.**

The Faculty of Biology is easy to reach both when arriving via Grójecka street (trams: 1, 7, 9, 25; tram stop: Częstochowska) or via Żwirki i Wigury street (bus: 157, 175, 504, 512; bus stop: Banacha-Szpital) or by foot – 15-20 minutes from the Sobieski Hotel and other recommended locations. See the map.

The Ochota Campus represents the biggest concentration of academic institutions dedicated to the development of biology, biomedicine and bioinformatics in Poland. There are several research institutes of the Polish Academy of Sciences and three of them, the Nencki Institute of Experimental Biology, Institute of Biochemistry and Biophysics and the International Institute of Molecular and Cell Biology (associated with the Academy) are engaged in the Conference organization. Also, there are several faculties of the Warsaw University (among them is the Faculty of Biology, which is one of the Conference co-organizing institutions) and the Warsaw Medical University.

### CONFERENCE OFFICE

The Registration Desk, located at Conference Venue is open:

August 27 <sup>th</sup> , 2011 (Saturday)	14:00 – 22:00
August 28 <sup>th</sup> , 2011 (Sunday)	8:30 – 19:00
August 29 <sup>th</sup> , 2011 (Monday)	8:30 – 16:00
August 30 <sup>th</sup> , 2011 (Tuesday)	8:30 – 16:00
August 31 <sup>st</sup> , 2011 (Wednesday)	8:30 – 15:30

#### **Registration:**

On site registration is available. Please, note that only cash payment will be available. The regular (200 €) as well as students and post-doctoral fellows (100 €\*) fees are applicable.

The registration fee includes: conference bag and materials, abstract book, daily coffee/tea, lunches and welcome reception.

\*There is an age limit of 35 years for students and post-doctoral fellows registration (for Israeli scientists the limit can be increased up to 38 years due to the mandatory military service).



There is also a fee for **accompanying persons** (75€). Accompanying person may participate in the Opening session and the Gala Dinner, and is entitled to coffee breaks and lunches.

There is a possibility to purchase **day passes** for each day of the Conference. The cost of the pass is 25 € and 50 € for young and for experienced researchers, respectively. During a given day of the Conference, day pass holders may participate in the scientific sessions and are entitled to coffee breaks and lunches.

## BADGES

Name badges must be visible and used at all times anywhere at the Conference venue and during social events. Lost badges can be replaced for registered participants presenting the ID.

Organizers and the supporting staff have red names on badges – you can ask them for assistance.

## LANGUAGE

The official language of the Conference is English (there will be no simultaneous translation)

## SPEAKERS' INFORMATION

Speakers are asked to provide their presentations to the Speaker's Room (follow the signs in the Conference venue) the day before the session for the morning sessions and at least two hours before the beginning of the session for afternoon sessions.

## POSTER PRESENTATION/EXHIBITION

The presenting author of each poster is requested to be present at her/his poster during one-hour poster session:

There are three poster sessions:

Sunday Session (August 28<sup>th</sup>) – posters from Sessions I - IV  
2:30 p.m. – 3:30 p.m.

Monday Session (August 29<sup>th</sup>) – posters from Sessions V, VI and VII (part one)  
11:30 a.m. – 12:30 p.m.

Tuesday Session (August 30<sup>th</sup>) – posters from Sessions VII (part two), VIII and IX  
2:00 p.m. – 3:00 p.m.

Poster boards are in the Conference Hall and are numbered consecutively as in the Abstract book. Please, place your poster before 9:00 a.m. on the indicated day. Special clips to pin up

posters are available at the Registration Desk. Pack your poster up not later than at 8 p.m. on the same day.

## PRIZES

Special Award for the Best Poster Presentation will be presented during the closing ceremony.

## LUNCHES and COFFEE BREAKS

Coffee/tea and standing lunch snacks will be served in the Conference Hall during the coffee breaks and lunch hours, respectively.

The lunch consists of sandwiches, a seasonal fruit, a sweet bar and a bottle of mineral water.

## WELCOME RECEPTION

Get-together party starts at the Conference Hall at 7:00 p.m. on Saturday, August 27<sup>th</sup>, after Opening Ceremony.

Wine and good food should certainly help to renew old acquaintances and establish fresh contacts.

## GALA DINNER

The Gala dinner, scheduled for Tuesday (August 30<sup>th</sup>, 2011) is facultative and the ticket can be still purchased during the Conference (cash payment only), but no later than by Sunday, August 28. Its cost is 5 € and 10 € for young and regular participants, respectively.

The dinner will be held on Tuesday, August 30<sup>th</sup> 2011 at 6:00 p.m. in the Central Agricultural Library of Michał Oczapowski at 66 Krakowskie Przedmieście St. The Library is located just near to the Plac Zamkowy, at the entrance to the Old Town.

## NO SMOKING POLICY

Please observe that the Conference Venue, including the patio, is a non-smoking area.

## INTERNET ACCESS

WiFi network access will be available in the Conference venue.

## MOBILE PHONES

Participants are kindly requested to switch off their mobile phones during lectures and refrain from talking by phone in the Lecture Hall.

## EATING OUT

At the Conference venue there is a buffet, which will be opened at 8:30 and available for most of the day. The buffet serves the variety of dishes. Please note, that this is optional and not included in the fee.

There are many different restaurants, bars, and clubs in the neighborhood (see map), in down-town and in Old Town. Most of them accept credit cards and some stay open until the last guest.

## ACCOMMODATION

Mazurkas Travel has prepared a special accommodation offer for the participants of the PARNAS 2011. Guaranteed is a number of rooms at several conveniently located hotels of various standards at very attractive prices

PARNAS 2011 Reservation Team  
Mazurkas Travel Biuro Podróży Sp. z o.o.  
Congress and Conference Bureau  
al. Wojska Polskiego 27, 01-515, Warsaw, Poland  
tel.: +48 22 389 41 50  
fax: +48 22 536 46 10  
parnas2011@mazurkas.com.pl  
Open hours:  
Monday - Friday 9:00 - 16.00

## MARRIOTT HOTEL\*\*\*\*\*

Al. Jerozolimskie 65/79, Warsaw, 00-697 Poland  
Phone: 48-22-6306306  
Fax: 48-22-8300311

This modern hotel – one of the tallest skyscrapers of Warsaw with 42 floors – is situated in the business and commercial centre of the city, next to the Central Railway Station and one of the symbols of Warsaw – Palace of Culture and Science. Reflecting Marriott's worldwide reputation for exceptional service its guests experience luxurious accommodation and an excellent Polish choice of dining.

distance to conference venue: 2500 meters

### SPECIAL RATES!

405 PLN for single room

405 PLN for double room

breakfast, VAT tax and service are included

## **NOVOTEL AIRPORT\*\*\*\***

1 Sierpnia St. 1 , 02-134, Warsaw, Poland  
Phone +48-22-5756000  
Fax: +48-22-5756999

The interesting hotel building is composed of a thoroughly renovated older wing and a new elevation (with a hip panoramic lift). Novotel Airport will give your stay a very pleasant background thanks to the ergonomic, tech - smart rooms and bright lobby. As a member of the Accor Group, Novotel keeps its services to a European standard. Sought after also for conferences & groups. For the individual guests the hotel provides free transport to and from the airport.

distance to conference venue: 3500 meters

### **SPECIAL RATES!**

240 PLN for single room

270 PLN for double room

breakfast, VAT tax and service are included

## **CAMPANILE HOTEL\*\***

Hotel CAMPANILE VARSOVIE / WARSZAWA  
Towarowa Str 2, 00-811 Warsaw, Poland  
Phone: +48 22 582 72 00  
Fax: +48 22 582 72 01

West of Warsaw, your air-conditioned Hotel Campanile is located in the town centre near the Okęcie Airport. It offers the tranquility you desire for a pleasurable break and is the ideal starting point for exploring the area.

distance to conference venue: 1800 meters

### **SPECIAL RATES!**

214 PLN for single room

249 PLN for double room

breakfast, VAT tax and service are included

## **PREMIERE CLASSE\***

PREMIERE CLASSE VARSOVIE  
Towarowa Str 2, 00-811 Warsaw, Poland  
Phone: +48 22 624 08 00  
Fax:+48 22 620 26 29

Premiere Classe Hotel is ideally located close to the city center with excellent public transport access to the whole of Warsaw. All rooms equipped in a bathroom with shower and WC, satellite television with Canal+

distance to conference venue: **1800 meters**

**SPECIAL RATES!**

189 PLN for single room

209 PLN for double room

breakfast, VAT tax and service are included

**TULIPAN DORMITORY**

Uniwersytecka 5, 02-036 Warsaw, Poland

Phone: +48 22-8221775, +48 22-8220422

Fax: + 48 22-8221775

Dormitory offers single and double rooms in segments with shared bathrooms with showers. Toilets are located on corridors.

distance to conference venue: 800 meters

**SPECIAL RATES!**

108 PLN for single room

135 PLN for double room

Please be informed that due to renovations in dormitory number of rooms is strongly limited so we encourage you to reserve room and finalize payment by July 15.

**MONEY EXCHANGE**

Polish currency is easy available in numerous ATM machines all around the city. You can also visit exchange office, for example at Warsaw Frederic Chopin airport or your hotel. 1 Euro is approximately 4 Polish zloty, and 1 US dollar approximately 2.70 Polish zloty. Taxi drivers might accept Euro or dollar notes, but will not have the change.

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Used abbreviations:

K	-	Keynote Speaker
L	-	Lecture
O	-	Oral presentation
P	-	Poster



August 27<sup>th</sup>, 2011  
Saturday

## OPENING CEREMONY

Faculty of Biology, 1 Miecznikowa Street

- 5:00 p.m. Welcome and introduction: Andrzej Dżugaj,  
Serhiy Komisarenko, Michael Eisenbach
- 5:30 p.m. Andrzej Dżugaj: **Jakub Karol Parnas Polish  
biochemist.**  
  
Rostislav Stoika: **Parnas Conferences: 1,2,3...**
- 6:00 p.m. Opening Lecture: K.1. Aaron Ciechanover  
**The Ubiquitin Proteolytic System - From Basic  
Mechanisms thru Human Diseases and onto  
Drug Development**
- 7:00 p.m. Get-together party

## KEYNOTE SPEAKER

9:00 a.m. K.2 Ada Yonath:  
**Thoughts about the origin of life and antibiotics resistance**

10:00 a.m. – 10:30 COFFEE BREAK

## I SESSION: POSTTRANSCRIPTIONAL REGULATION (Part I)

Chair: Orna Elroy-Stein

10:30 a.m. L.1.1 Szymon Świeżewski  
**The role of non coding RNA in flowering time regulation**

11:00 a.m. L.1.2 Witold Filipowicz  
**Regulation of miRNA repression and miRNA turnover in mammalian cells**

11:30 a.m. L.1.3 Noam Shomron  
**microRNA play a dominant role in cellular processes**

### *Oral presentations*

12:00 a.m. O.1.1 Hanna Kedzierska, Agnieszka Piekuelko, Witkowska, Anna Wojcicka, and Alicja Nauman  
**Thyroid hormone receptor alpha (TR $\alpha$ ) regulates heterogeneous nuclear ribonucleoprotein A1 (hnRNPA1)-dependent alternative splicing of tumor suppressor CEACAM1 in human renal cancer**

12:15 p.m. O.1.2 Amir Mor, Shimrit Suliman, Rakefet Ben-Yishay, Sharon Yunger, Yehuda Brody, Aaron Shav-Tal  
**Dynamics of Single mRNP Nucleo-Cytoplasmic Transport Through the Nuclear Pore in Living**

12:30 p.m. – 1:00 p.m. LUNCH

## II SESSION: POSTTRANSCRIPTIONAL REGULATION (Part II)

Chair: Serhiy Komisarenko

1:00 p.m. L.2.1 Klaus Rajewsky  
**microRNA control in the immune system and deregulation in immune pathologies**

1:30 p.m. L.2.3 Dmitry Loukinov  
**CTCF and its testis specific paralog BORIS in shaping of epigenome in cancer**

*Oral presentations*

2:00 p.m. O.2.1 Volodymyr A. Halytskiy  
**MicroRNA-directed allelic exclusion in immunoglobulin gene loci**

2:15 p.m.O.2.2 Andrii Labyntsev, Natalia Korotkevich, Elizaveta Yurchenko, Andrii Kaberniyk, Denys Kolibo  
**T-domain of diphtheria toxin may retard maturation of endosomes**

2:30 p.m. – 3:30 p.m. POSTERS (Sessions I – IV)

3:30 p.m. – 4:00 p.m. COFFEE BREAK

### III SESSION: BIOINFORMATICS FOR GENE EXPRESSION

Chair:Ganna Elska

4:00 p.m. L.3.1 M. Tukalo  
**The methods of structural and computational biology in study on fidelity of gene expression**

4:30 p.m. L.3.2 David Horn  
**Specific Peptides Facilitate Metagenomic Analysis**

5:00 p.m. L.3.3 Michal Korostynski  
**Application of bioinformatics in pharmacogenomic research**

*Oral presentations:*

5:30 p.m. O.3.1 Andriy Kuklin, Bogdan Tokovenko, Nataliya Makogon, Barbara Jarzab, Maria Obolenskaya  
**Changes in gene expression profile in primary culture of rat hepatocytes treated with interferon alpha.**

5:45 p.m. O.3.2 Olga Tsyplik, Nestor Zaburanny, Bohdan Ostash, Viktor Fedorenko  
**Structure-based characterization of GntR superfamily regulators of Streptomyces coelicolor A3(2)**

### POSTERS/Sessions I-II, III and IV

*Sessions I-II*

P.1-2.1 Alexandra Yu. Filatova, Andrey V. Marakhonov, Ancha Baranova, Mikhail Yu. Skoblov  
**Single non-coding transcript could participate in antisense regulation of ASCL1 gene family**

- P.1-2.2 Maciej Cieśla, Magdalena Kozakowska, Anna Stefańska, Klaudia Skrzypek, Oleksandr Yagensky, Agnieszka Łoboda, Józef Dulak, Alicja Józkowicz  
**Orchestrating myogenesis: microRNAs processing is influenced by Heme Oxygenase-1 in myocytes**
- P.1-2.3 Z. Dvashi, M. Shohat, H. Jacobi, D. Ben-Meir, R. Ashery-Padan, A. Solomon, M. Rosner, S. Lavi  
**PPM1A a key player in wound healing and inflammation**
- P.1-2.4 Gilad Sivan, Ranen Aviner, Orna Elroy-Stein  
**Mitotic modulation of translation elongation factor 1 leads to hindered tRNA delivery to ribosomes**
- P.1-2.5 Monika Janczarek, Teresa Urbanik-Sypniewska, Anna Skorupska  
**Sequence motifs engaged in the regulation of *rosR* transcription in *Rhizobium leguminosarum* bv. *trifolii***
- P.1-2.6 Aleksandra Janusz, Jacek Milek, Małgorzata Perycz, Leszek Kaczmarek, Magdalena Dziembowska  
**Interaction of the fragile X mental retardation protein with MMP-9 mRNA in neurons.**
- P.1-2.7 Dmytro Klymyshyn, Maria Rabyk, Maria Honchar, Victor Fedorenko  
**Expression of pleiotropic regulatory genes in streptomycetes**
- P.1-2.8 Anna Stachurska, Christine Boesch-Saadatmandi, Magdalena Kozakowska, Gerald Rimbach, Alicja Jozkowicz, Jozef Dulak, Agnieszka Loboda  
**The possible role of miRNA in OTA-triggered changes in LLC-PK1 kidney tubular cells**
- P.1-2.9 Andrey V. Marakhonov, Peter E. Prokhorov, Ancha Baranova, Mikhail Yu. Skoblov  
**Novel non-protein-coding natural antisense transcript *AFAP1AS* participates in regulation of *AFAP1* expression**
- P.1-2.10 Avigail Dreazen, Shlomit Avraham, Abed Khalaileh, Areej A. S. Khatib, Gideon Zamir, Yuval Dor, Oded Meyuhav  
**Phosphorylation of ribosomal protein S6 (rpS6) is a determinant of pancreatic tumorigenesis**
- P.1-2.11 Kavita Ramji, Dorota Kulesza, Bożena Kaminska  
**Plasmid-transcribed shRNA in contrast to siRNA, activate NFκB signaling pathway and differentially modulate melanoma cell survival**
- P.1-2.12 Noa Rivlin, Ran Brosh, Tirosh Shapira, Rachel Sarig, Yael Assia, Yoav Shezer, Alina Molchadsky, Naomi Goldfinger, Varda Rotter  
**Can p53 secure the genomic fidelity of iPS cells?**
- P.1-2.13 Jakob L. Rukov, Roni Wilentzik, Jeppe Vinther, Noam Shomron

**miRNA pharmacogenomics: Pharmacogenomics genes demonstrate varying perceptibility to microRNA regulation**

- P.1-2.14 Anna Stachurska, Christine Boesch-Saadatmandi, Agnieszka Witalisz, Gerald Rimbach, Alicja Jozkowicz, Jozef Dulak, Agnieszka Loboda  
**Role of HO-1 in alterations evoked by ochratoxin A in expression of miRNAs and its target genes**
- P.1-2.15 Michal Szczesniak, Izabela Makalowska  
**Large-scale identification of microRNAs in transcriptomic data**
- P.1-2.16 Maria Szwacka, Renata Zawirska-Wojtasiak, Michał Gośliński, Aleksandra Twardowska  
**Unintended consequences of cucumber (*Cucumis sativus* L.) transformation**
- P.1-2.17 Victoria A. Serzhanova, Andrey V. Marakhonov, Anna V. Baranova, Mikhail Yu. Skoblov  
**MYH11 and NDE1: potential sense–antisense pair in human**
- P.1-2.18 Harel Zalts and Noam Shomron  
**Implications of microRNA 5p and 3p strand switching**
- P.1-2.19 Marek Żywicki, Kamilla Bąkowska-Żywicka, Norbert Polacek  
**Revealing functional RNA processing products from RNA-seq data**

*Session III*

- P.3.1 Jakub Lenart, Bozena Kaminska, Michal Dabrowski  
**Comparison of binding of 44 transcription factors to putative regulatory regions identified by histone modifications, open chromatin and conservation**
- P.3.2 Adi Givati, Sharon Ben-Zvi and Noam Shomron  
**Genomegems: evaluation of genetic variability from deep sequencing data**
- P.3.3 Jakub Mieczkowski, Karolina Swiatek-Machado, Bozena Kaminska  
**Analysis of consequently changed signaling pathways — a novel method for analyzing microarray data**
- P.3.4 Andrzej Nagalski, Michal Dabrowski, Jacek Kuznicki, Marta B. Wisniewska  
**LEF1 and TCF7L2 are candidates for terminal selectors of thalamic neurons**
- P.3.5 R. R. Panchuk, V. V. Chumak, D. Ya. Havrylyuk, R. B. Lesyk, R. S. Stoika  
**Bio-evaluation of novel heterocyclic 4-thiazolidone derivatives designed for targeting Bcl-X<sub>L</sub> antiapoptotic protein**
- P.3.6 Piotr Przanowski, Marcin Kruczyk, Karolina Swiatek-Machado, Jakub Mieczkowski, Michal Dabrowski, Claes Wadelius, Jan Komorowski, Bozena Kaminska

**Identification of transcription factor STAT3 target genes and epigenetic modifications in glioma cells using whole genome chromatin immunoprecipitation**

- P.3.7 Sharon Penias Navon, Tali Schwartzman, Noam Adir  
**Short peptide sequences inhibit prokaryotic translation**

*Session IV*

- P.4.1 Joanna Bem, Magdalena Tyburczy, Bozena Kaminska  
**Activation of transcription factor NFkB in malignant and nonmalignant glioma cell lines**
- P.4.2 Emilia Bialopiotrowicz, Bozena Kuzniewska, Neli Kachamakova-Trojanowska, Jacek Kuznicki, Urszula Wojda  
**Lymphocytes from SAD patients display cell cycle alterations, unlike lymphocytes from FAD patients**
- P.4.3 Mayank Chaturvedi, Bojja Sreedhar, Leszek Kaczmarek1  
**Nanoparticles for delivery of tissue inhibitor of matrix metalloproteinases to the brain as means to ameliorate consequences of ischemic cell death**
- P.4.4 Iwona Ciechomska, Bozena Kaminska  
**Cyclosporine A-induced endoplasmic reticulum stress triggers autophagy of malignant glioma cells**
- P.4.5 Krishnendu Ganguly, Emilia Rejmak, Michał Stawarski, Leszek Kaczmarek  
**A novel approach of gene delivery in cortex and hippocampus of mouse brain to study mmp-9 gene regulation in depolarized neurons**
- P.4.6 Vitaliy Gumenyuk, Tamara Kuchmerovska, Irene Triakash  
**The effects of antiepileptic agents on fusion of synaptic vesicles in cellfree model of exocytosis and the role of cholesterol in this process**
- P.4.7 Kamila Borowczyk, Joanna Tisonczyk, Hieronim Jakubowski  
**Changes in homocysteine thiolactone disposition and neurotoxicity in bleomycin hydrolase (*Blmh*) and paraoxonase 1 (*Pon1*) knock-out mice**
- P.4.8 Patryk Janus, Magdalena Kalinowska-Herok, Małgorzata Pakuła-Cis, Wojciech Pigłowski, Katarzyna Szoltysek, Adam Makurowski, Marek Kimmel, Piotr Widłak  
**Co-regulation of expression of NFkB-dependent genes by the HSF1 transcription factor**
- P.4.9 Bozena Kaminska, Konrad R. Gabrusiewicz, Paweł Wisniewski, Aleksandra Ellert-Miklaszewska, Maciej Lipko, Michał Dabrowski, Magdalena Kijewska, Beata Kaza, Małgorzata Porycka  
**Identification of signal transduction pathways re-programming macrophages into tumor supportive cells — on the missing link between inflammation and cancer**
- P.4.10 M. Kijewska, M. Sielska, A. Ellert-Miklaszewska, K. Gabrusiewicz, B. Kaminska

**A role of osteopontin — a small integrinbinding ligand in glioma pathology**

- P.4.11 Anastasiia M. Maistrenko, Irina V. Lushnikova, Maxim M. Orlovsky, Victor E. Dosenko, Galina G. Skibo  
**Expression of HIF mediates endogenous neuroprotection of hippocampal neurons during the ischemic and anoxic precondition**
- P.4.12 Katarzyna Misztal, Marta B. Wisniewska, Mateusz Ambrozkiwicz, Jacek Kuznicki  
 **$\beta$ -catenin is constitutively present in the nuclei of postmitotic thalamic neurons due to WNT-independent mechanism**
- P.4.13 Debora Rapaport, Yevgenia Lugassy, Eli Sprecher, Mia Horowitz  
**Loss of snap29 impairs endocytic recycling and cell motility**
- P.4.14 Olga Romanets, Mariya Yurchenko, Tatyana Malysheva, Aleksander Taranin, Branka Horvat, Svetlana P. Sidorenko  
**Identification of a novel CD150 isoform in tumors of central nervous system**
- P.4.15 Svetlana P. Sidorenko, Olga Romanets, Mariya Yurchenko, Yuriy A. Zozulya, Tatyana A. Malysheva, Alexander M. Najakshin, Alexander V. Taranin, Branka Horvat  
**CD150 — a new marker for tumors of the central nervous system**
- P.4.16 Katarzyna Szoltysek, Patryk Janus, Adam Makuchowski, Marek Kimmel, Piotr Wiđlak  
**Crosstalk between NF $\kappa$ B- and p53-dependent signaling pathways in HCT116 colon carcinoma cells**
- P.4.17 Katarzyna Zybura-Broda, Renata Amborska, Leszek Kaczmarek, Marcin Rylski  
Expression of pro-epileptic protease Matrix Metalloproteinases 9 is regulated by DNA methylation during epileptogenesis

#### SESSION IV: GENE EXPRESSION AND BRAIN DISEASE

Chair: Leszek Kaczmarek

9:00 a.m. L.4.1 Hermona Soreq  
**Cholinergic-mediated microRNA control of hnRNPs A/B regulates cortical alternative splicing and neural functioning**

9:30 a.m. L.4.2 Włodzimierz Krzyżosiak  
**RNA in pathogenesis and experimental therapy of polyglutamine diseases**

10:00 a.m. L.4.3 Alła Rynditch  
**Intersectins and neurodegenerative diseases**

10:00 a.m. – 11:00 a.m. COFFEE BREAK

##### *Oral presentations*

11:00 a.m. O.4.1 Hubenya O.V., Minchenko D.O., Kharkova A.P., Moenner M., Minchenko O.H.  
**The neurotrophic factors mRNA expression in U87 glioma cells and its regulation by hypoxia and ischemic conditions are dependent from ERN1 gene function.**

11:15 a.m. O.4.2 Karolina Swiatek-Machado, Michal Dabrowski, Jakub Mieczkowski, Piotr Przanowski, Alicja Adach Kilon, Bozena Kaminska  
**Identification of novel targets of STAT3 transcription factor in glioma cells**

11:30 a.m. – 12:30 p.m. POSTERS (Sessions V, VI and VII part one)

12:30 p.m. – 1:00 p.m. LUNCH

#### SESSION V: CELL GUIDANCE

Chair: Michael Eisenbach

1:00 p.m. L.5.1 Victor Sourjik  
**Robust information processing in bacterial chemotaxis**

1:30 p.m. L.5.2 Avraham Yaron  
**Mechanisms of axonal guidance and degeneration during development**

2:00 p.m. L.5.3 Benjamin Kaupp  
**A cellular module for single-molecule sensitivity in sperm**



*Oral presentations*

- 2:30 p.m. O.5.1 Gabriel Zarbiv, Hui Li, Amnon Wolf,  
Gary Cecchini, S. Roy Caplan, Victor Sourjik,  
Michael Eisenbach  
**Are energy complexes associated with the  
switch-motor complex of bacterial flagella?**
- 2:45 p.m. O.5.2 Zdioruk M., Brodyak I., Sybirna N. A  
**The Molecular Mechanism of Lectin-Induced  
Signal Transduction in Leukocytes under  
Diabetes Mellitus**
- 3:00 p.m. – 3:15 p.m. **Sigma-Aldrich** Company Presentation  
Markus Veit:  
**Whole Genome and Transcriptome:  
Amplification Ideal Solutions for Microarray and  
Chromatin Immunoprecipitation**

AFTER 3:15 SIGHT-SEEING

**POSTERS/Sessions V, VI and VII (part one)**

*Session V*

- P.5.1 Leah Armon, Michael Eisenbach  
**Hyperactivation is a component of human sperm  
chemotaxis**
- P.5.2 Liudmyla Dankevich, Natalia Leonova, Igor Dragovoz  
**Auxin's production ability of rhizobia and  
phytopathogenic bacteria *in vitro***
- P.5.3 Kamila Domińska, Agnieszka Wanda Piastowska, Anna  
Gajos-Michniewicz, Tomasz Ocheński  
**The influence of Angiotensin II and Relaxin 2 on the  
cell proliferation in prostate cancer cell lines**
- P.5.4 Fiedorowicz Ewa, Iwan Małgorzata, Kocbach Bartłomiej  
**The influence of  $\mu$ -opioid receptor agonist and  
antagonist peptides on peripheral blood mononuclear  
cells (PBMCs)**
- P.5.5 Anastasiya Heneha, Marta Bura, Svitlana Mandzynets,  
Dmytro Sanagurski, Volodymyr Novikov  
**Kinetic characteristic of amino acid derivatives of 1,4-  
naphthoquinone action on  $\text{Na}^+$ ,  $\text{K}^+$ -activated  $\text{Mg}^{2+}$ -ATP  
hydrolysis depending of coldblooded**
- P.5.6 Rostyslav Horbay, Natalia Boiko, Yelyzaveta Shlyakhtina,  
Natalia Mitina, Anna Ryabtseva, Olexander Zaichenko,  
Rostyslav Stoika  
**Effective application of novel polymeric  
nanocomposites for delivery of anticancer drugs at *in vivo*  
treatment of murine**

- P.5.7 Galyna Kleveta, Natalia Sybirna, Andrzej Sobota, Katarzyna Kwiatkowska  
**LPS activates motility of macrophages governed by actin cytoskeleton reassembly**
- P.5.8 Piotr Kowalec, Anna Chelstowska, Anna Kurlandzka  
**A new open reading frame of *Saccharomyces cerevisiae* encoding a protein likely involved in the regulation of Pol II transcription**
- P.5.9 Kinga Borzęcka, Andrzej Sobota, Kazimiera Mrozińska, Katarzyna Kwiatkowska  
**Tyrosine kinases of the Src family participate in activation of macrophages by LPS**
- P.5.10 K. Nepyvoda, K. Lavrova, L. Garmanchuk, L. Ostapchenko  
**EGF and Herceptin influence on proliferation, adhesion and glucose consumption of tumor cells MCF-7**
- P.5.11 Oksana O. Piven, Igor E. Kosteski, Larysa L. Macewicz, Glenn Radice, Lubov L. Lukash  
**Beta-catenin functions in embryonic and postnatal heart formation**
- P.5.12 Olena Martynenko, Tamara Kyrylenko, Andriy Stepanyugin, Nadezhda Adamchuk-Chala, Dmytro Plodnik, Anatoliy Potopalsky  
**Impact of izatison on nucleic metabolism of wheat sprouts**
- P.5.13 Małgorzata Przybyszewska Agnieszka Kotlarz, Ewa Bielczyk, Joanna Miłoszewska, Halina Trembacz, Paweł Swoboda, Agnieszka Lipiec, Beata Grygalewicz, Marzena Biernacka, Andrzej Kutner, Sergiusz Markowicz  
**Stem cell-like properties of CD133<sup>+</sup> cell subpopulation of mouse and human colon cancer cell lines — a potential target for novel anti-cancer therapies**
- P.5.14 Myroslava Romaniuk, Oksana Neofita, Natalia Holovchak, Maria Dyka, Dmytro Sanahursky  
**Low-level laser irradiation effect on membrane-related processes in loach embryo cells**
- P.5.15 L. Rudavska, I. Novitskiy, O. Kluchivska, R. Stoika  
**Effect of low intensity diode laser irradiation towards normal and transformed fibroblast cell lines**
- P.5.16 A. Shysh, A. Zhukovska, J. Radosinska, B. Bacova, N. Tribulova, V. Dosenko, A. Moibenko  
**Influence of n-3 polyunsaturated fatty acids on GJP-43 gene and connexin-43 protein expression in experimental models of ischemia-reperfusion and diabetes mellitus**
- P.5.17 Monika Sobczak, Tomasz Boczek, Ludmila Zylinska  
**MGST1 downregulation increases PC12 cells susceptibility to oxidative stress**
- P.5.18 V. J. Syrvatka, I. I. Hevkan, Y. I. Slyvchuk, G. O. Milovanova, O. J. Yrkiv, O. V. Shtapenko, S. V. Fyodorova, I. O. Matuha, I. I. Rozgoni

**Effects of silver nanoparticles on some parameter of rabbit's granulose cells and its ability to promote the maturation of rabbit's oocytes *in vitro***

P.5.19 Artur Ciešlar-Pobuda, Yuriy Saenko, Magdalena Skonieczna, Sebastian Student, Joanna Rzeszowska-Wolny

**Changes of the levels of reactive oxygen species in cells exposed to ionizing radiation**

*Session VI*

P.6.1 Roman Sivko, Natalia Krisanova, Tatiana Borisova

**[1,2-<sup>3</sup>H(N)]cholesterol redistribution and sodium-dependent glutamate uptake in cholesterol-enriched rat brain nerve terminals**

P.6.2 Olga Denysova, Larisa Vodopyanova, Gennadiy Zhegunov and Johannes M. Nitsche

**Permeability coefficient determination of bovine erythrocytes for glycerol and DMSO**

P.6.3 Larisa Vodopyanova, Olga Denysova

**Research of dogs' bone marrow cells safety after cryopreservation in liquid nitrogen**

*Session VII (part one)*

P.7.1 Itzhaq Azoulay, Esther Nachliel, Yossi Tsfadia, Abdussalam Azem

**Characterization of the interaction between Hsp70's SBD and a ligand**

P.7.2 Mariia Boretska, Andriy Ostapchuk, Irina Kozlova

**Protein and carbohydrate composition of the exopolymeric matrix as the main factor in the thionic bacteria biofilm formation**

P.7.3 Piotr Bragoszewski, Agnieszka Gornicka, Agnieszka Chacinska

**Life and death of proteins destined to the intermembrane space of mitochondria**

P.7.4 Burlova-Vasilieva Nataliia, Savchuk Oleksiy, Ostapchenko Ludmila

**Antistreptokinase antibodies prevent inhibition of platelet reactivity**

P.7.5 Nadiya Byts, Lyudmyla Drobot

**Adaptor protein Ruk/cin 85 regulates NGF-dependent neuronal differentiation**

P.7.6 Mykola Dergai, Oleksandr Dergai, Olga Novokhatska, Liudmila Tsyba, Inessa Skrypina, Alla Rynditch

**Differential ubiquitination and degradation of intersectin 1 isoforms**

P.7.7 Oleksandr Dergai, Mykola Dergai, Inessa Skrypina, Liudmyla Matskova, Liudmyla Tsyba, Gosta Winberg, Alla Rynditch

**Shb scaffold mediates interaction between adaptor ITSN1 and viral protein LMP2A**

- P.7.8 Vinh Phu Hoang, Silvia Vávrová, Lenka Valkovičová, Mahesh Madyagol, Jan Turňa  
**Expression, purification and evaluation ATPase activity of four essential tellurite resistance proteins**
- P.7.9 Justyna Jezierska, Joachim Goedhart, Jan T. Westerink, Eric A. Reits, Dineke S. Verbeek  
**SCA14 Mutations affect the intramolecular clamp between the c1 domain and carboxyl-terminus of pkc – gamma**
- P.7.10 Ewelina Jurewicz, Irena Kasacka, Edward Bańkowski, Anna Filipek  
**Calcium binding protein S100A6 (calyculin) in Wharton's jelly – localization and interacting partners**
- P.7.11 Agnieszka Kikulska, Michał Młacki, Tomasz Wilanowski  
**Does the lack of GRHL1 activity increase the chance of skin cancer development?**
- P.7.12 Ewa Kilanczyk, Sławomir Filipek, Anna Filipek  
**ERK1/2 is dephosphorylated by a novel phosphatase – CacyBP/SIP**
- P.7.13 Natalia Korotkevich, Andrii Labyntsev, Alla Honcharenko, Denis Kolibo, Serhiy Komisarenko  
**Soluble form of Heparin-binding EGF-like growth factor promotes EGF receptor intracellular traffic distinct from the lysosomal degradation and receptor recycling**
- P.7.14 Jerzy Kotlinowski, Anna Grochot-Przęczek, Magdalena Kozakowska, Ewa Zuba-Surma, Rafał Derlacz, Józef Dulak, Alicja Józkowicz  
**PPAR-gamma modulation influences EPC functions**
- P.7.15 Wojciech Kowalski, Dominika Nocoń, Andrzej Gamian, Dariusz Rakus  
**Association of phosphoglycerate mutase with glycolytic complex regulates energy production in cancer cells**
- P.7.16 Edward A. Czuryło, Natalia Kulikova, Andrzej Sobota  
**Actin polymerization by lysenin**
- P.7.17 Magdalena Lebieczńska, Agnieszka Karkucinska-Wieckowska, Jan M. Suski, Gyorgy Szabadkai, Grzegorz Wilczyński, Jakub Włodarczyk, Maciej Pronicki, Jerzy Duszynski, Paolo Pinton, Mariusz R. Wieckowski  
**Phosphorylation of p66Shc under oxidative stress in fibroblasts of NARP patients**
- P.7.18 Lena Lifshitz, Irit Pevzner, Joelle Bigay, Anna Parnis, Dan Cassel  
**Dissecting the function of the ArfGAP2/3 proteins in the COPI trafficking machinery**
- P.7.19 Mahesh Madyagol, Vinh Phu Hoang, Stanislav Stuchlík, Jan Turňa  
**Evaluation of horizontal gene transfer from genetically modified plants to bacteria**
- P.7.20 Dominika Malinska, Malgorzata Bejtka, Joanna Szczepanowska, Jerzy Duszynski

**Energy metabolism in cells with glycogen branching enzyme deficiency**

P.7.21 Yehoshua Maor, Jinlong Yu, Paula M. Kuzontkoski, Bruce J. Dezube, Xuefeng Zhang, Jerome E. Groopman

**Cannabidiol inhibits expression and constitutive signaling of Kaposi's sarcoma-associated G protein-coupled receptor and induces programmed cell death**

P.7.22 Ewelina Marszałek, Piotr Koprowski, Andrzej Sobota

**Recombinant perfringolysin O, a useful probe for cholesterol detection**

P.7.23 Olga P. Martsenyuk, Berthold Huppertz, Kateryna L. Romanets, Maria Y. Obolenskaya

**The influence of elevated level of homocysteine on human placental function**

P.7.24 Elena M. Bakurova, Kseniya O. Mironova, Tatiyana V. Moroz, Berta G. Borzenko

**The activity of adenosine deaminase in erythrocytes and leukocytes is normal even in cases of neoplastic pathology**

**SESSION VI: TRANSPORTERS IN ADAPTATION TO HOSTILE ENVIRONMENTS**

Chair: Shimon Schuldiner

9:00 a.m. L.6.1 Klaas Martinus Pos

**On the molecular mechanism of the AcrB RND-efflux pump**

9:30 a.m. L.6.2 Isaiah T Arkin

**Mechanism and selectivity in the bacterial Na<sup>+</sup>/H<sup>+</sup> antiporter**

10:00a.m. L.6.3 Christine Ziegler

**Molecular mechanism of betaine transport and stress regulation by the Na<sup>+</sup>-coupled symporter BetP**

*Oral presentation*

10:30 a.m. O.6.1 Shyian M.A., Gryshkova V.S., Kostianets O.I., Filonenko V.V., Kiyamova R.G.

**Heterogeneous expression of the human sodium-dependent phosphate co-transporter 2b in ovarian cancer and normal ovaries**

10:45 a.m. O.6.2 Łukasz Samluk, Magdalena Czeredys, Krzysztof Skowronek, Katarzyna A. Nałęcz

**Regulation of amino acid/carnitine transporter B<sup>0,+</sup> (ATB<sup>0,+</sup>) by protein kinase C**

11:00 a.m. – 11:30 a.m. COFFEE BREAK

**SESSION VII: PROTEIN STRUCTURE AND FUNCTION**

Chair: Maciej Żylicz

11:30 a.m L.7.1 Matthias Bochtler

**CG methylation and depletion**

12:00 a.m. L.7.2 Krzysztof Liberek

**Hsp100 proteins - disaggregating chaperone machines**

12:30 p.m. – 1:00 p.m. LUNCH

1:00 p.m. L.7.3 Mariusz Jaskólski

**Structural aspects of PR-10 protein-ligand interactions**

*Oral presentation*

1:30 p.m. O.7.1 Barak Akabayov, Charles C. Richardson

**The effect of macromolecular crowding on DNA replication: A structure-function study**

1:45 p.m. O.7.2 Joanna Suszynska-Zajczyk, Magdalena Łuczak, Łukasz Marczak, Edyta Gendaszewska-Darmach, Tomasz Twardowski, Hieronim Jakubowski  
**Changes in human endothelial cell proteome caused by N-homocysteinylation of proteins**

2:00 p.m. – 3:00 p.m. POSTERS (Sessions VII, part two and VIII-IX)

3:00 p.m. – 4:00 p.m. DISCUSSION ON THE BEST POSTER NOMINATIONS

### **POSTERS/Sessions VII (part two) and VIII-IX**

#### *Session VII (part two)*

- P.7.25 Michał Młacki, Agnieszka Kikulska, Tomasz Wilanowski  
**Grainyhead-like 1 (GRHL1) transcription factor in development of skin cancers**
- P.7.26 Nikolay V. Molochkov, Alexandra Yu. Ryazanovaa, Lyudmila A. Abrosimovaa, Elena A. Kubarevaa  
**Secondary structure of SsoII-like (Cytosine-5)-DNA methyltransferases N-terminal region determined by circular dichroism spectroscopy**
- P.7.27 Dmytro Morderer, Oleksii Nikolaienko, Inessa Skrypina, Liudmyla Tsyba, Volodymyr Cherkas, Alla Rynditch  
**Interaction of endocytic adaptor intersectin 1 with microtubule stabilizer STOP, which is involved in synaptic transmission**
- P.7.28 Natalia Niedźwiecka, Edward F. Skorkowski  
**In vitro effect of pH and cadmium on malic enzyme from herring sperm from the Gulf of Gdansk — similarities in structure and activity profiles under adverse conditions**
- P.7.29 Katarzyna Kiraga-Motoszko, Anna Niedzwiecka, Anna Modrak-Wojcik, Janusz Stepinski, Edward Darzynkiewicz, Ryszard Stolarski  
**Thermodynamics of molecular recognition of mRNA 5' cap by yeast eukaryotic initiation factor 4E**
- P.7.30 Olga Shatova, Igor Sedakov, Igor Zinkovych  
**Estrogen receptors expression and clinical peculiarities of breast cancer**
- P.7.31 Olga Novokhatska, Mykola Dergai, Oleksandr Dergai, Liudmyla Tsyba, Inessa Skrypina, Jacques Moreau, Alla Rynditch  
**Functional diversity of intersectin family adaptor proteins**
- P.7.32 Marcin Olszewski, Jan Balsewicz, Marta Nowak, Józef Kur  
**Novel DNA-binding protein from Nanoarchaeum equitans Kin4-M binds all kinds of nucleic acids**
- P.7.33 Magdalena Osińska, Kamil Kobylecki, Krzysztof Skowronek, Elżbieta Wyroba

- Expression and purification of recombinant Paramecium Rab7 proteins**
- P.7.34 N. Byts, A. Fedoseenko, G. Pasichnyk, A. Basaliy, A. Samoylenko, L. Drobot
- The impact of adaptor protein Ruk/CIN85 in the maintenance of cancer stem cell phenotype**
- P.7.35 Wiktor Prus, Magdalena Zabka, Paweł Bieganowski, Anna Filipek
- The effect of Sgt1 phosphorylation on its nuclear translocation**
- P.7.36 Nikolay A. Pydiura, Eduard V. Lugovskoy, Evgeniy M. Makogonenko, Serhiy V. Komisarenko
- Two different regions of the fibrin coiled-coil domain important for fibrin protofibril lateral association**
- P.7.37 Anatoly Samoylenko, Nina Kozlova, Nadiya Byts, Thomas Kietzmann, Lyudmyla Drobot
- Adaptor protein Ruk/CIN85 forms complex with prolyl hydroxylase-2 influencing hypoxia-inducible factor 1 alpha stability**
- P.7.38 Mariana Yu. Shabelnik, Larisa M. Kovalevska, Mariya Yu. Yurchenko, Larisa M. Shlapatska, Yuriy Rzepetsky, Svetlana Sidorenko
- The role of PKD1 and PKD2 protein kinases in regulation of gastric tumor cell biology**
- P.7.39 Tevie Mehlman, Bassem Ziadeh, Gabriel Simon, Atim Atte Enyenihi, Milana Fraiberg, Michael Eisenbach, Roman Zubarev, Alla Shainskaya
- Novel application of the advanced mass spectrometry approaches to characterize acetylation of CheY, a response regulator in chemotaxis of *Escherichia coli***
- P.7.40 Galyna Y. Shuvayeva, Oxana B. Groholska, Nataliya I. Igumentseva, Ciro Isidoro, Oleh V. Stasyk
- Autophagy inhibition promotes cell death in the human ovarian carcinoma SKOV3**
- P.7.41 Mikhail Yu. Skoblov, Andrey V. Marakhonov, Anna V. Baranova
- Study of a functional role of KCTD-family proteins**
- P.7.42 Monika Sokolowska, Honorata Czapińska, Matthias Bochtler
- Hpy188I–DNA pre- and post-cleavage complexes — snapshots of the GIY-YIG nuclease mediated catalysis**
- P.7.43 Agnieszka M. Topolska, Walter J. Chazin, Anna Filipek
- Does CacyBP/SIP dimerization modulate ERK2 activity?**
- P.7.44 Csaba Tóth, Roland Pálffy, Stanislav Stuchlík, Ján Turňa
- Cloning, expression and antimicrobial activity of the human cathelicidin LL-37**
- P.7.45 Karolina Tułodziecka, Katarzyna A. Nałęcz
- Palmitoylcarnitine affects localization of growth associated protein GAP-43 in plasma membrane subdomains of NB-2a cells**



- P.7.46 Pavol Utekal, Stanislav Stuchlik, Pavol Kois, Jan Turna  
**Cloning, expression, purification and characterization of recombinant ADH from *Saccharomyces cerevisiae***
- P.7.47 M. Veremieva, V. Zakcharychev, B. Negrutskii, A. El'skaya  
**Uncoordinated expression of the elongation factor 1 subunits in human lung carcinomas**
- P.7.48 Urszula Wasik, Beata Jastrzebska, Serge Weis, Grazyna Niewiadomska, Anna Filipek  
**Posttranslational modifications of CacyBP/SIP under normal and pathological conditions**
- P.7.49 Grzegorz Wieczorek, Moshe Ben-David, Clifford Felder, Yacov Ashani, Dan Tawfik, Israel Silman, Joel L. Sussman  
**Molecular Dynamics and substrate docking studies on paraoxonase 1**
- P.7.50 Piotr Wilk, Zbigniew Zieliński, Tomasz Ruman, Wojciech Rode  
**Chemical phosphorylation of thymidylate synthase on histidine residue(s)**
- P.7.51 Marek Zarzycki, Robert Kolodziejczyk, Ewa Maciaszczyk, Robert Wysocki, Mariusz Jaskolski, Andrzej Dzugaj  
**Crystal structure of human muscle fructose-1,6-bisphosphatase mutant E69Q in T conformation**
- P.7.52 Vladimir P. Zaviyalov, Sergey N. Ryazantsev, Vladimir M. Tischenko  
**Three-dimensional structure and function of human immunoglobulin G subclasses**
- P.7.53 Emilia A. Lubecka, Krzysztof Kazimierczuk, Anna Zawadzka-Kazimierczuk, Jan Stanek, Krystian Stodus, Jerzy Ciarkowski, Wiktor Kozminski, Igor Zhukov  
**Structural analysis of the second catalytic cysteine half-domain (SCCH) from mouse ubiquitin-activating enzyme E1 based on NMR data in solution**
- P.7.54 Keren Zohary, Lada Gevorkyan - Airapetov, Abdussalam Azem  
**Mitochondrial protein import: a structurefunction analysis of the TIM23 complex**
- P.7.55 Lyudmila M. Koval, Olena Yu. Lykhmus, Serhiy V. Komisarenko, Maryna V. Skok  
**Nicotinic acetylcholine receptor subtypes in b lymphocytes**
- P.7.56 Olena M. Kalashnyk, Olena Yu. Lykhmus, Maryna V. Skok  
**Nicotinic acetylcholine receptors in monocytic, astrocytic and lymphoid cells studied by flow cytometry and confocal microscopy**
- P.7.57 Zenovii Yu. Tkachuk, Olexander V. Kozlov, Igor Ya. Dubey, Larysa V. Tkachuk  
**2'-5'-Oligoadenylates and their analogs as modulators of activity of protein kinases**

- P.8-9.1 Tomasz Boczek, Bożena Ferenc, Michalina Kosiorek, Sławomir Pikula, Ludmila Zylinska  
**Neurogenesis in PMCA2 or PMCA3- reduced PC12 cell lines is accompanied by alterations in CaM, GAP43 and MAP kinases**
- P.8-9.2 N. A. Bogdanova, E. V. Dolgaya, I. S. Magura, N. Kh. Pogorelaya, V. A. Yavorsky, E. A. Lukyanets  
**Potassium channels as major determinants of neuronal excitability**
- P.8-9.3 Tatiana Borisova, Roman Sivko, Natalia Krisanova  
**Altered glutamate transport and the development of synaptopathy**
- P.8-9.4 Galyna L. Gergalova, Olena Yu. Lykhmus, Olena M. Kalashnyk, Lyudmyla M. Koval, Victor I. Tsetlin, Sergiy V. Komisarenko, Maryna V. Skok  
**Mitochondria express alpha 7 nicotinic acetylcholine receptors involved in Ca<sup>2+</sup> buffering and apoptosis**
- P.8-9.5 Agnieszka Graczyk, Wiesława Leśniak  
**Localization and role of S100A6, a calcium binding protein, in differentiating epidermis**
- P.8-9.6 Anna Jaworska, Joanna Gruszczyńska-Biegała, Aleksandra Szybińska, Tomasz Węgiński, Kamran Honarnejad, Jochen Herms, Jacek Kuźnicki  
**Effect of mutations in presenilin-1 gene on ER calcium release in Alzheimer's disease**
- P.8-9.7 Jarosław Korczyński, Anna Wasik, Katarzyna Sobierajska, Wojciech Brutkowski, Paweł Pomorski, Wanda Kłopocka  
**Alternative signaling pathways compensate Rho-kinase inhibition in glioma C6 cells**
- P.8-9.8 Antoni Kowalski, Ludmiła Żylińska, Elżbieta Rębas  
**New role of neuron-specific PMCA isoforms?**
- P.8-9.9 Aneta Rogalska, Agnieszka Marczak, Arkadiusz Gajek, Marzena Szwed, Zofia Józwiak  
**Epothilone B — mechanism of action in human ovarian cancer cells**
- P.8-9.10 Anna Selmi, Mariusz Malinowski, Radosław Bednarek, Czesław S. Cierniewski  
**Matrix metalloproteinases secretion without affecting the intracellular Ca<sup>2+</sup> level in HT29 cell line activated by thymosin β<sub>4</sub>**
- P.8-9.11 Marta Wojewoda, Jerzy Duszyński, Joanna Szczepanowska  
**NARP mutation and lack of mtDNA trigger mitochondrial biogenesis which can be modulated by selenite supplementation**
- P.8-9.12 Antoni Wrzosek, Agnieszka Łukasiak, Adam Szewczyk  
**Large-conductance potassium channel opener NS1619 affects calcium homeostasis in muscle and non-muscle cells**
- P.8-9.13 Tomasz Boczek, Monika Sobczak, Bożena Ferenc, Ludmila Zylinska

**The effect of PMCA2 or PMCA3 suppression on MAPK signaling pathways during PC12 cells differentiation**

P.8-9.14 Veronika Zhylenko, Oleg Klenov, Sophia Zaletok

**Influence of a Fenugreek extract on Ca755 mouse mammary carcinoma growth, polyamines level and expression of protein products of some genes in tumor cells**

6:00 p.m. GALA DINNER

Central Agricultural Library of Michał Oczapowski at 66 Krakowskie Przedmieście St.

**SESSION VIII: CALCIUM IN SIGNALLING (Part I)**

Chair: Olga Matyshevska

9:00 a.m. L.8.1 Nana Voitenko

**AMPA receptor trafficking in spinal dorsal horn neurons under inflammatory pain**

9:30 a.m. L.8.2 Ludmila Borisova

**Calcium signalling in micro - and macrovessels**

10:00 a.m. L.8.3 Olga Matyshevska

**Calcium signaling in normal and transformed T-cells, possible ways of modification**

*Oral presentations*

10:30 a.m. O.8.1 Natalia Kandaurova, Lidiya Babich,

Sergiy Shlykov, Sergiy Kosterina

**Ca<sup>2+</sup>- and Mg<sup>2+</sup> induced changes of membrane potential of smooth muscle mitochondria**

10:45 a.m. O.8.2 Alexandr A. Shkrabak, Tatiana O. Veklich,

Alexandr V. Bevza

**Inhibitory properties of calixarenes relative to ion-transporting ATPase of myometrium cells plasma membrane. Kinetic and structural analysis**

11:00 a.m. – 11:30 a.m. COFFEE BREAK

**SESSION IX: CALCIUM IN SIGNALLING (Part II)**

Chair: Jacek Kuźnicki

11:30 a.m. L.9.1 Ilya Bezprozvanny

**Neuronal store-operated calcium entry pathway as a novel therapeutic target for Huntington's disease treatment**

12:00 a.m. L.9.2 Brian J. Bacsikai

**Intracellular calcium dysregulation in Alzheimer's diseases**

12:30 a.m. – 1:00 p.m. LUNCH

1:00 p.m. L.9.3 Urszula Wojda

**Neuronal calcium signaling mediated by calmyrin proteins**

*Oral presentations*

- 1:30 p.m. O.9.1 Michal Pirog, Agnieszka Gizak, Dariusz Rakus  
**FBPase Stabilizes Mitochondrial Function in Cardiomyocytes**
- 1:45 p.m. O.9.2 Olga Krupko, Alla Tarasenko, Nina Himmelreich  
**Presynaptic ionotropic glutamate receptors serve as a trigger of ROS production in axon terminals**
- 2:00 p.m. SPECIAL SPEAKER – K.3 Alexander Wlodawer  
**Structural biology as a tool for designing drugs against retroviral diseases**
- 3:00 p.m. – 3:30 p.m. CLOSING CEREMONY, AWARDS FOR THE BEST POSTER PRESENTATION

## OTHER INFORMATION AND HINTS

### CALLS FROM POLAND

From a stationary phone: 00 Your Country Code The Number Abroad; From a mobile phone: + Your Country Code The Number Abroad

### CURRENCY

Polish monetary unit is called **złoty** [*zloty*; officially PLN]. There are 1, 2 and 5 zł. coins and higher denomination banknotes (10, 20, 50, 100 and 200 zł). Denominations below 1 zloty are called **grosze** [*groshe*]. The exchange rate (August 2011) is: 1 EURO  $\approx$  4 PLN; 1 US dollar  $\approx$  2,8 PLN. You can exchange the money in banks or exchange offices (kantor).

### EMERGENCY CALLS:

From mobile phone 112 for all cases

From stationary phone:

- Ambulance 999

- Police 997

- Fire department 998

### ENGLISH SPEAKING

You can easily communicate in English in the hotels and most of the restaurants. If you need to obtain some information in the street, the chances are better if you approach young people.

### INSURANCE

The organizers do not take responsibility for individual, travel or personal insurance. Participants are advised to carry their insurance policies. The emergency mobile phone numbers of the organizers are provided (see above).

### PAYMENTS

Credit cards are widely accepted in Poland, but small shops and news kiosks may accept cash only. There is a dense network of cash machines in Warsaw.

### SAFETY

Warsaw is a fairly safe city. Being a foreigner you may, however, be more exposed to a petty street crime, such as pick-pocketing, especially in crowded tourist sites and around public transportation areas, including bus 175 to/from the airport.

### TAXI

Better call for your taxi instead of hailing one on the street. It won't cost you extra and there is a chance the operator will speak English. The taxi usually arrives in 5-10 minutes. Once inside make sure that the meter is running. The fare should be indicated

as “1” between 6 a.m. till 10 p.m. or “2” if it is night. The meter is set at 6 PLN at the start and the rate is usually 2-2.2 PLN/km. Ask for a receipt (rachunek) at the end of your journey.

Recommended company (English speaking operators): MPT, tel. **(+48)19191**;

Some useful directions for a taxi driver: “Hotel Sobieski (*or other*)”, „Biologia-Miecznikowa”- when going to the Conference Venue or „Stare Miasto” - when you want to go to the Old Town.

## TIPS

In a taxi, restaurants etc. 10-20%, if satisfied with the service.

## TOILETS

Expect to pay 1 - 2 PLN to use a public toilet. Toilets for women are sometimes marked with a circle on the door and toilets for men with a triangle.

## TRANSPORT

You can get around the city using **buses**, **trams** or **metro** (one line only); tickets and fares are the same. Lines operate from 5 a.m. to around 11 p.m. when the night buses take over. **Tickets** can be purchased at the numerous kiosks or ticket machines (usage instructions in English). A single fare ticket costs 3.60 zł, a 24-hour ticket - 12 zł, and a 3-day ticket – 24 zł. Remember to validate the ticket after getting on a bus/tram (in a yellow validator located near the door) or at the metro gate. For more information please visit Warsaw transportation system web page <http://www.ztm.waw.pl/>, available in English, German and Russian.

## WEATHER

In the end of August it can be anything from rainy and cold (15°C) to warm and sunny (22-27°C).

## EXCURSIONS

The 2011 PARNAS Conference has partnered with Mazurkas Travel in order to provide resources for sightseeing tours and accompanying persons program during conference days.

**WARSAW ORIENTATION TOUR** price: 100 PLN (approx. 25 EURO)

date: Saturday, 27 August

hours: 10:00 - 13:00

The Warsaw orientation tour includes visits to all the not-to-be-missed monuments and sights of Warsaw.

OLD TOWN – the Castle Square, King Sigismund’s Column, St. John’s Cathedral, the Old Town Market Square, the Barbican.

ROYAL ROUTE – aristocratic residences and famous statues, University of Warsaw, historical churches, Łazienki Park.

HISTORICAL SIGHTS – Ghetto Memorial, Monument of the Warsaw Uprising, Tomb of the Unknown Soldier, Grand Theatre, Chopin's Monuments, Belvedere Palace.

The price includes: transportation and guide assistance.

**JEWISH HERITAGE TOUR** price: 160 PLN (approx. 40 EURO)

date: Monday, 29 August

hours: 15.00 - 19.00

Until the outbreak of World War II, Poland was an important Jewish cultural and spiritual centre. Warsaw's Jewish population was then about 400.000, which was almost one third of the city's total, and the largest Jewish population after New York. The vast majority of this strong Jewish community perished during the Holocaust. However, traces of the original Jewish community remain. The tour includes: Jewish Cemetery, Nozyk Synagogue, Jewish Historical Institute, sites connected with the Ghetto Uprising of 1943, the Memorial of the Heroes of the Warsaw Ghetto, the Judenrat Building, Anielewicz's Bunker and the Umschlagplatz.

The price includes: entrance fees, deluxe coach transportation and English guide assistance.

Tour operates at minimum 15 person

**CRACOW & AUSCHWITZ NAZI CAMP VISIT** price: 680 PLN (approx. 170 EURO)

date: Sunday, 28 August

hours: 7.00 - 22.00

In the morning: CRACOW – The Royal City. A city over one thousand years old, located in the upper course of the Vistula river, a city called "little Rome" and the "cradle of European Culture". Cracow is rich in history, outstanding works of art and architecture. The city is the location of the Jagiellonian University (founded in 1364), the Royal Castle Wawel, with its mythical Cathedral and the largest and most beautiful town square in Europe. Cracow is a city complex unlike most others in Europe. In the afternoon: AUSCHWITZ – the largest of the Nazi concentration camps during World War II. It has been the largest 'death' factory in the history of humanity and a silent witness to human tragedy. Auschwitz consisted of several units, including the largest one in Brzezinka (Birkenau). Out of the millions of people brought there between 1940-1944, at the time of liberation of the Camp only 60 to 70 thousand utterly emaciated victims were alive.

price includes: English speaking local guide and tour guide assistance, entrances, lunch at the local restaurant, 1st class train ticket Warsaw > Cracow > Warsaw, deluxe coach transportation in Cracow.

Tour operates at minimum 10 person.