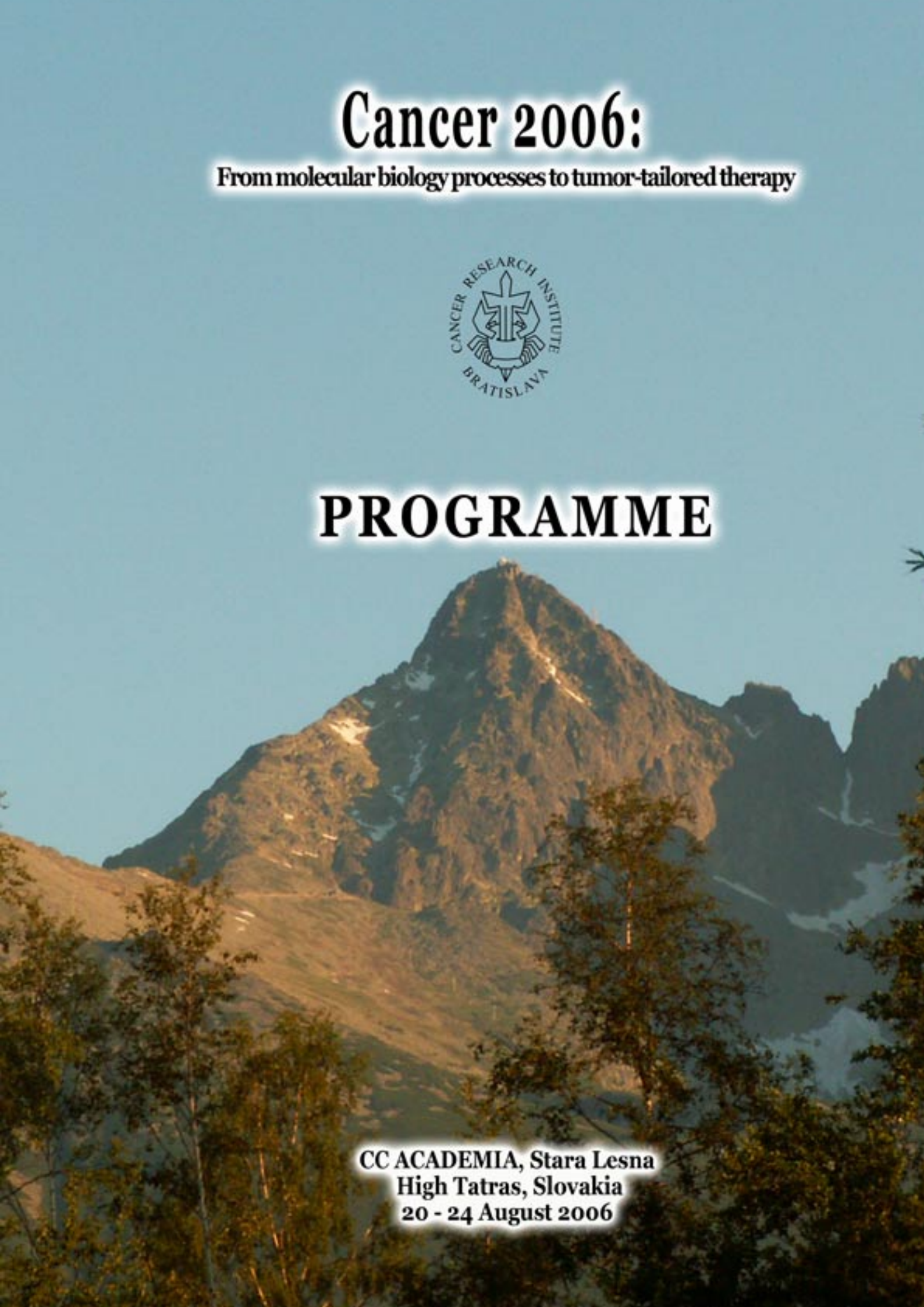
Cancer 2006:

From molecular biology processes to tumor-tailored therapy

CANCER RESEARCH INSTITUTE BRATISLAVA

PROGRAMME



CC ACADEMIA, Stara Lesna
High Tatras, Slovakia
20 - 24 August 2006

The Patrons and Honorable Guests

Ivan Gasparovic
President of Slovak Republic
Patron of the Meeting

Stefan Luby
President of the Slovak Academy of Sciences
Patron of the Meeting

Rodolphe M. Vallee
Ambassador to Slovak Republic

Cancer 2006:
From molecular biology processes to tumor-tailored therapy

International Symposium
in occasion of 60th anniversary of Cancer Research Institute
of Slovak Academy of Sciences, Bratislava

President of the Conference
Cestmir Altaner

Scientific Organizing Committee
Zdena Bartosova (SK)
Bennett Van Houten (USA)
Josef Jiricny (CH)
Maria Bujalkova (SK)

Local Organizing Committee
Zdena Bartosova
Tomas Krivulcik
Maria Bujalkova
Michal Kovac
Jana Jakubikova
Zuzana Dudasova
Ivana Fridrichova
Erika Chudejova

Edited by: Z. Bartosova & M. Bujalkova
Photo Inserts: T. Krivulcik
Design: T. Krivulcik & Z. Bartosova

Welcome address from the President of the Conference

Distinguished quests, ladies, gentlemen, dear friends,

It is a pleasure and great privilege for me indeed to welcome you all to our conference on behalf of the Cancer Research Institute of the Slovak Academy of Sciences. The international conference is organized to celebrate the 60 year anniversary of establishment of the Cancer Research Institute in Bratislava. Cordially I welcome our friends from abroad who in various ways have been supporting our scientists during years. I am very grateful to all of those who accepted our invitation to participate in this meeting. In particular I extend my thanks to President of Slovak Republic Mr. Ivan Gasparovic and president of Slovak Academy of Sciences Prof. Stefan Luby who accepted to be patrons of this conference. I cannot finish in thanks without expressing my gratitude to the whole organizing committee, particularly to the head of it, Zdenka Bartosova and to all sponsors.

When a person celebrates sixty years of her/his existence on this world, it is usually frequent to use this occasion to reflect on life, work, and events of the past years and to express some thoughts concerning the present and future state of her/his existence. I think it is my duty to try to do something like it even for our Institute. There are of course small differences between existence of person being time-limited, and timeless existence of cancer research and therefore also the continuation of the Cancer Research Institute.

Whatever, allow me to tell you my view about the history of the Cancer Research Institute in Bratislava, its past and future scientific orientation, and hopefully about successful continuing existence. My personal view might be influenced by the fact, that I have been employed in the Institute during the whole my professional life. I had have the opportunity to follow the Institute from the opposite site of the Institute's leadership for long period of time and last 12 years from the director's position.

The Institute was established in the St. Elisabeth Hospital in 1946, soon after the Second World War ended. From the early beginning the Institute was devoted to experimental and clinical research. In 1969 the institute was divided into two independent institutions, clinical, now being St. Elisabeth Oncological Institute and experimental, now being the Cancer Research Institute of the Slovak Academy of Sciences. Despite the administrative separation, common activities and collaboration sustained up to now forming the Comprehensive Cancer Center. In 1997 we moved to new building in the vicinity of clinical departments of The National Cancer Institute, the further institution which was created from the original one.

Founder of the Institute Prof. Viliam Thurzo was rather interesting personality and very positively influenced the development and international recognition of the Institute. Prof. Thurzo might purposely or intuitively manage the Institute by choosing good scientific personalities at the beginning as well as later on. Very shortly after the Institute was founded, political repression started in Czechoslovakia. Prof. Thurzo used his political influence to create cancer research in Bratislava from personalities that he collected from physicians, scientists, who were mostly politically not acceptable in the University. Furthermore, he was able to orient the research activity very progressively not only in clinical research but mainly in the basic research. It was his idea to focus the research to study viruses causing cancer. This field in those days was not very attractive, but later as you know, the study of RNA tumor viruses - retroviruses became very productive in the whole world, leading to important discoveries, like identification of oncogenes, reverse transcriptase, and this field contributed and still does significantly to our better understanding of mechanisms in which cancer cells are formed. I think we can be proud that our Institute at least partially contributed to these achievements studying avian sarcoma virus B77, which was discovered in our Institute.

In my opinion, generally the study of retroviruses in former Czechoslovakia has been performed on a high scientific level, particularly in Prague by Prof. Jan Svoboda and in Bratislava. On the basis of papers dealing with B77 avian sarcoma virus several scientists from our Institute were able to continue their work in outstanding world known laboratories. An example of this retrovirological school that started in our institute is Dr. Mikulas Popovic who in Dr. Robert Gallo's laboratory in the United States discovered cells supporting multiplication of human immunodeficiency virus (HIV) and thus laid the basis for diagnostic of HIV infection.

The Institute is not only known by past retrovirus studies, but we are proud to have active groups in molecular genetics dealing traditionally with DNA repair, groups working in field of cancer immunology, hereditary cancer predisposition, chemical carcinogenesis, chemoprevention, molecular biology and other usual fields in cancer research institutes. National Tumor Registry of Slovakia, which is for years guided from our Institute belongs to a group of well known registers in Europe. Furthermore, the Cancer Research Institute is editing an international journal NEOPLASMA already for 53 years.

Founder of the Institute Prof. Thurzo also realized that cancer research needs international ties and collaboration, and at last but not least some degree of freedom for scientists in the Institute, which was in the totality which we lived so long, not considered as important. Considering these facts, the Institute developed to the institution where people were able not only to work on reasonable level, but also feel like in liberal oasis of the totality around. This liberal atmosphere in the Institute was even more pronounced later when Dr. Viliam Ujhazy as director succeeded Prof. Thurzo. Despite political suppression in the state, many people from the Institute were able to go for scientific stays in abroad, mainly due to success in competition for international cancer fellowships sponsored by the International Union Against Cancer. If we follow statistics in obtaining of Eleanor Roosevelt Cancer Fellowships or ICRETT fellowships our Institute is on remarkable place. Our scientists started collaboration with outstanding laboratories all over the world in past, and of course after 1989 the collaborations increased substantially. We regard this point as very important, which is certainly very positively influencing the scientific performance of the Institute, but on the other hand, the long term stays of our young scientists abroad are leading to partial discontinuation of natural process of scientific staff replacement for younger scientists in the home Institute.

When we thought about the organization of this conference on occasion of 60 years of cancer research in Bratislava we took in account the international relationships of the Institute. We tried to invite people who have been contributing to the mutual collaborations in past and presently.

As regards the future orientation of the Institute, I am convinced that the scientific level and the orientation of any institute are determined by the quality of scientific personalities of the Institute and by the budget. To keep and improve the Institute's scientific performance is a run for long distance, requiring lot of work, enthusiasm, and good luck. It seems that the orientation of our institute would not change dramatically. The PhD students in our institute and our young scientists are certainly a good promise for the continuation of research activity started 60 years ago.

I believe that time is coming when the new knowledge gained from recent basic cancer research achievements, mainly of molecular biological character should start to be incorporated into the clinical praxis. Future scientific orientation of the Cancer research Institute is considering and implementing this reality of translational research.

I would like to thank to all participants which came to celebrate with us the anniversary. We really appreciate the past and present support from many friends of the Institute. It would be long list of names, therefore I apologize that I am not going to name you. We are missing some friends who I thought they will be here now, but the fate decided differently. I would like to mention Prof. Howard M. Temin, Nobel Prize winner from University of Wisconsin - Madison, who supported intellectually and materially this institute for many years up to his last days.

Once more again I would like to express my gratitude to all invited speakers. We would appreciate that your friendship and support last also in future. There are in cancer research so many challenges ahead but the prospect for new treatments is one of great optimism.

I wish you to enjoy the conference and then return home inspired to do even better work!

Cestmir Altaner

Welcome address from the Chair of Organizing Committee

Dear Participants,

I am delighted to welcome you all to "Cancer 2006: From molecular biology processes to tumor-tailored therapy" meeting in High Tatras, a National Treasure of the Slovak Republic. I hope that you will find inspiration in the outstanding science that will be discussed here in this beautiful setting. The Scientific programme committee has worked hard to prepare a high quality meeting for you with a number of outstanding researchers who will give talks about their latest findings in different topics related to the conference theme.

I am very grateful to all invited speakers who accepted our invitation, as well as, to regular participants who found this meeting to be interesting for them. My deep appreciation goes to Co-chairs, Bennett Van Houten and Josef Jiricny, my wonderful friends, who contributed their time and effort to help me in many ways during the preparation of the meeting and to the core of the local organizing committee, particularly Tomas Krivulcik and Maria Bujalkova for their boundless energy who have helped make this conference a reality.

At last, but not least I would like to thank to President of the symposium Cestmir Altaner for trusting in my capability to organize this conference. This was a rather brave act by him as this was, the first time in my life, that I was asked to Chair a Conference organizing committee. I hope that the meeting will meet and exceed all his, and your expectations. Finally I want to thank all of you dear participants for taking the time out of your busy schedules to attend this meeting. Enjoy the meeting, enjoy the nature!

Zdena Bartosova

Welcome address from the Co-chairs of Scientific Programme Committee

Cancer is a misnomer. The term was first coined by the ancient Egyptians, possibly because solid tumours affecting certain internal organs are surrounded by multiple blood vessels that resemble crab's legs. They treated cancer with extract of mistletoe, cut during full moon with a golden knife. We now know that cancer can have many guises; it can affect many different organs, it can be triggered by many different agents, it can result through many different biological pathways and it can have several different outcomes. But, in spite of substantial progress in our understanding of malignant transformation and in cancer diagnosis, there are hospices that treat cancer with mistletoe extract even today – and without knowing the identity of its active ingredients.

Cancer has been the subject of intensive study for decades now and mankind has made substantial progress in understanding the disease. We now know that, despite their diversity, cancer cells often have two common denominators: 1) the loss of proliferative control, and 2) the loss of programmed cell death pathways. We identified receptors, both nuclear and membrane, that control cell proliferation in normal tissue and that can contribute towards cancer when overstimulated or overexpressed. We identified oncogenes, both viral and cellular, that can trigger uncontrolled cell division, and/or loss of cell death signals as a result of gain of function mutations, and we identified tumour suppressors, the loss of which contributes towards cancer. However, cancer seldom results from a single mutational event; its genesis involves the interplay of several deregulated pathways and it is this aspect that makes cancer so hard to understand and, ultimately, to combat.

The fact that tumours in one and the same tissue can arise by several different mechanisms makes it highly unlikely that a single therapeutic strategy will be efficacious on all tumours of one type. That is partly why cancer therapy has made only limited progress in the past thirty years.

Josef Jiricny

Bennett Van Houten

Much of this progress is due to technological developments both at the global systems level and at the highly reductionist level of single molecules, that make it possible to diagnose the disease earlier, or that minimise the deleterious effects of therapy on normal tissue. With a few notable exceptions that are helping to combat specific types of malignancies, progress in cancer chemotherapy has been limited, such that metastatic disease is still largely fatal. The way ahead depends on several factors. First and foremost, we have to learn more about the origins of cancer at the molecular level. Modern technology (transcriptomics, proteomics etc.) now allows us to have a global look at normal and transformed cells and it is likely that these data will help us identify novel markers of the disease and, hopefully, also new targets for therapy. Using gene expression profiling we have learned that certain tumours from the same tissue, and even of the same cell type, can be subdivided into different subtypes, and thus provide promise for specific therapeutic approaches for specific tumours. To date, however, most transcriptomic experiments have produced long lists of genes, the activity of which is altered in cancer. The challenge is to map these genes onto specific cellular pathways. But most of us do not really know how to deal with this huge wealth of information. At the other end of the spectrum of research, structural biology has provided us with views of cancer - causing proteins at atomic resolution, which will hopefully help us develop small molecule inhibitors. For these reasons, we need to become more interdisciplinary and consequently work as teams. There is an urgent need to include in our discussion circle not only biologists from different fields, but also informaticians, computational scientists and modellers, who will help us untangle the complex web of interactions that makes up a human cell and who will help us identify the pathways that were perturbed during transformation, and ultimately who will help design drugs to target proteins involved in the cancer process.

As you will see from the program, we have attempted to bring together a diverse group of scientists who might not otherwise meet. Our intention is to stimulate multi-faceted discussions that may lead to cross-fertilisation of ideas and thus to a better understanding of the causes and treatments of the diverse set of diseases we call cancer. This meeting represents our attempt to start moving in this direction. With the generous support of the Slovak Academy of Sciences, the Slovak Cancer Research Foundation and the Sponsors, we brought together virologists, molecular and cell biologists, clinicians, geneticists and technology developers, in the hope of stimulating discussions and of coming up with new approaches to solving an ancient dilemma: how to combat cancer. This is a lofty goal, but what better place to contemplate it than in the beautiful mountains of the High Tatras? If we face this challenge together, we shall be bringing back from this meeting not only memories of the stunning views from the Tatras' peaks, but also new perspectives on cancer.

We wish you a very productive and stimulating meeting!

Bennett Van Houten & Josef Jiricny

General Informations

Conference Venue:

The Symposium is held in Congress Center (CC) ACADEMIA in Stara Lesna which is located in the beautiful High Tatras Mountains, a National treasure of the Slovak Republic. The CC Academia is situated at the foot of the Lomnicky peak (2634 metres) on the border of the Tatra National Park, in a quiet surrounding a short way off the towns Tatranska Lomnica and Stary Smokovec.

Registration:

The conference Registration Desk will be situated in the hotel foyer on Sunday 20/8 between 16.00 - 18.00. Please direct all enquires to the Conference Registration Desk managed by Zuzana Dudasova and Jana Jakubikova or to any member of the Conference Team who will be on hand at the conference venue and social events for information at any time. Please wear your name badge at all times. The internet will be available in the Registration office all the time.

Zuzana Dudasova Jana Jakubikova

Poster displays:

Any delegates displaying posters leave them at the conference desk during registration. The conference staff will mount them and make them available for viewing in the Banquete hall from Monday evening through to Thursday evening. The delegates will pick-up their posters Friday morning in the registration office. Poster session is scheduled for Tuesday 22/8 after dinner starting at 20.00 together with light buffet and drinks.



Smoking:

There is a NO smoking policy within the Congress Center (CC). Any delegate wishing to smoke can do so outside the CC.

Telephones:

Please ensure that mobile phones are turned off whilst in the conference sessions.

Lunches and dinners

Buffet lunches at Monday, Tuesday and Thursday will be served in the Banquete Hall between 13.00 - 14.00 of the CC. The dinners at Monday and Tuesday will be served in the Restaurant of the CC. The congress center staff will control the flow of delegates to avoid congestion. We appreciate your cooperation.

Opening ceremony and Welcome Reception:

The official Opening ceremony and Welcome reception, to which all participants are kindly invited, will be held on Sunday 20/8 starting at 19.00 in the banquet hall of the CC. The Honorable Guests are expected. The dress code: gentlemen - lounge suit, ladies - cocktail dress.

Gala dinner:

The Gala dinner on Thursday will be held in the traditional Slovak restaurant "Zbojnicka Koliba" in Stara Lesna starting at 20.00. The residents of Hotel Academia, Hotel Forton and Pension Marmota gather together in the front of accommodation facilities between 19.00 - 19.30 and all walk together to the Restaurant. The dress code is smart casual. Don't forget to wear your name badges as they will be required for entry. If you have not already registered for the Gala dinner tickets cost 25,-€.

Social event:

You can explore surroundings by your own or to join one of guided tours that have been prepared for the participants and accompanying persons. All participants who booked the tour are kindly asked to meet in front of hotel ACADEMIA on Wednesday 23/8 at 7.00 (*Hiking in High Tatras*) or at 8.00 (*Historical Sightseeing Tour*). For the tour *Hiking in High Tatras* we recommend you to take OUTDOOR SHOES and WARM WATERPROOF CLOTHES. The sunglasses and the hat are also a good idea to bring with. Price for both guided tours: 25,- € each

Useful Contact Numbers

Delegate Hotels

Hotel ACADEMIA***	www.hotelacademia.sk, Tel: +421 52 4467 464 - 6
Hotel FORTON***	www.forton.sk, Tel: +421 52 4467 461
Pension MARMOTA**	www.penzionmarmota.sk, +421 52 4467 547

Taxis

+421 905 700 333, +421 905 552 672, +421 903 064 041, +421 52 44 22 525

Cancer 2006:
From molecular biology processes to tumor-tailored therapy

TOPICS

The WTSI Cancer Genome Project
Retroviruses in oncogenesis
Molecular pathogenesis in cancer
DNA damage and repair
Cancer genetics
Tumor cell signaling and cell death
Carcinogenesis / Anticarcinogenesis
Tumor - tailored therapies
Stem cells and cancer stem cells
Cancer proteomics

INVITED SPEAKERS

Bennett Van Houten (USA)
Linda Wolff (USA)
Kathleen Boris-Lawrie (USA)
Juraj Bies (USA)
Ivan Horak (USA)

Andy Futreal (UK)
Geoffrey Margison (UK)
Mark O'Driscoll (UK)

Josef Jiricny (CH)
Gerhard Christofori (CH)
Karl Heinimann (CH)

Minna Nystrom (FIN)

Andrew Collins (NO)

Leonard Mullenders (NL)

Richard Kettmann (BE)

Jiri Lukas (DK)

Martin Brendel (BR)

Krzystof Szyfter (PL)

Jan Svoboda (CZ)

Cestmir Altaner (SK)
Zdena Bartosova (SK)
Jozef Bizik (SK)
Miroslav Chovanec (SK)
Miroslav Pirsel (SK)
Jan Sedlak (SK)
Vladimir Zajac (SK)

Overview of each day

SUNDAY 20th August

10.00		Bus departure from Bratislava to Stara Lesna (Conference venue)
16.00	- 18.00	Registration
19.00		Opening ceremony & Welcome reception

MONDAY 21st August

8.10	- 9.00	Keynote lecture
9.00	- 10.45	Session Retroviruses in malignant transformation
10.45	- 11.15	Coffee break
11.15	- 13.00	Session Molecular pathogenesis of cancer
13.00	- 14.00	Lunch
14.00	- 15.45	Session DNA damage and repair processes I.
15.45	- 16.15	Coffee break
16.15	- 17.45	Session DNA damage and repair processes II.
17.45	- 18.00	Preclinical and clinical imaging
19.00		Dinner

TUESDAY 22nd August

8.30	- 9.20	Keynote lecture
9.20	- 11.00	Session Cancer genetics
11.00	- 11.30	Coffee break
11.30	- 13.00	Session Tumor cell signaling and cell death
13.00	- 14.00	Lunch
14.00	- 15.45	Session Carcinogenesis / Anticarcinogenesis I.
15.45	- 16.15	Coffee break
16.15	- 17.30	Session Carcinogenesis / Anticarcinogenesis II.
19.00	- 20.00	Dinner
20.00		Poster session

WEDNESDAY 23rd August

7.00		Social event - Alternative 1 - Hiking in High Tatras
8.00		Social event - Alternative 2 - Historical sightseeing tour
19.00		Invited speakers dinner

THURSDAY 24th August

8.20	- 9.10	Keynote lecture
9.10	- 10.40	Session Tumor - tailored therapies
10.40	- 11.10	Coffee break
11.10	- 12.25	Session Stem cells and cancer stem cells
12.25	- 13.00	Session Cancer proteomics
13.00	- 14.00	Lunch
14.00	- 16.00	Young scientists present
16.00	- 16.30	Closing ceremony
17.00	- 18.00	European Social Fund Project Discussion Session
20.00		Gala dinner

FRIDAY 25th August

10.00		Bus departure (Stara Lesna - Bratislava)

Scientific Programme - MONDAY 21 August

8.10 - 9.00 **Keynote lecture**
Chair: Zdena Bartosova

L1: *The WTSI Cancer Genome Project: understanding the targets (45min)*
Speaker: ***Andy Futreal***, Wellcome Trust Sanger Institute, Hinxton, UK

9.00 - 10.45 **Session Retroviruses in malignant transformation**
Chair: Cestmir Altaner

L2: *New insights into translational regulation of growth control genes: lessons derived from study of retroviruses (30min)*
Speaker: ***Kathleen Boris-Lawrie***, The Ohio State University, USA

L3: *Metabolic pathways involved in transformation induced by oncoviral Tax proteins (30min)*
Speaker: ***Richard Kettmann***, Faculty of Agronomy, Gembloux, Belgium

L4: *Cell defense against retroviruses (30min)*
Speaker: ***Jan Svoboda***, Institute of Molecular Genetics, Prague, Czech Republic

10.45- 11.15 COFFEE BREAK

11.15 - 13.00 **Session Molecular pathogenesis of cancer**
Chair: Jan Sedlak

L5: *The mechanisms of inactivation of the wild-type allele in hereditary cancers such as FAP and HNPCC (30min)*
Speaker: ***Karl Heinimann***, University of Basel, Switzerland

L6: *Cyclin-dependent kinase inhibitor p15INK4B in leukemia and normal hematopoiesis (30min)*
Speaker: ***Linda Wolff***, National Cancer Institute, Bethesda, USA

L7: *Leukemogenesis and c-Myb: story of a tightly regulated transcriptional regulator (30min)*
Speaker: ***Juraj Bies***, National Cancer Institute, Bethesda, USA

13.00 - 14.00 LUNCH

14.00 - 15.45 **Session DNA damage and repair processes I.**
Chair: Josef Jiricny

L8: *In search of damage: Structure function studies of nucleotide excision repair proteins (30min)*
Speaker: ***Bennett Van Houten***, NIEHS, Research Triangle Park, NC, USA

L9: *Cellular responses to DNA damage: Molecular mechanisms and spatio-temporal organization in living mammalian cells (30min)*
Speaker: ***Jiri Lukas***, Institute of Cancer Biology and Centre for Genotoxic Stress Research, Danish Cancer Society, Copenhagen, Denmark

L10: *DNA double strand break repair and cancer predisposition: Lessons from human syndromes (30min)*
Speaker: ***Mark O'Driscoll***, Genome Damage and Stability Centre, University of Sussex, United Kingdom

15.45 - 16.15 COFFEE BREAK

16.15 - 17.45 **Session DNA damage and repair processes II.**
Chair: Bennett Van Houten

L11: *Repair of oxidative DNA damage in the helicase mutants (30min)*
Speaker: ***Miroslav Pirsel***, Cancer Research Institute of SAS, Bratislava, Slovakia

L12: *Repair of oxidative DNA damage in human cancers (15min)*
Speaker: ***Barbara Tudek***, Institute of Biochemistry and Biophysics, Polish Academy of Sciences, Poland

L13: *DNA repair capacity in individuals exposed to styrene and patients with type 1 diabetes mellitus (15min)*
Speaker: ***Rudolf Stetina***, Faculty of Military Health Sciences, Czech Republic

L14: *Current aspects on stannous chloride genotoxicity (15min)*
Speaker: ***Cristina Pungartnik***, Universidade Estadual de Santa Cruz, Brasil

17.45 - 18.00 L15: **Preclinical and Clinical Imaging** *(15min)*
Speaker: ***Anezka Ridzikova***, *Siemens Medical Solutions*

19.00 DINNER

Scientific Programme - TUESDAY 22 August

8.30 - 9.20 **Keynote lecture**
Chair: Zdena Bartosova

L16: *Towards the therapy of tumours with microsatellite instability (45min)*
Speaker: ***Josef Jiricny***, Institute of Molecular Cancer Research, University of Zürich, Switzerland

9.20 - 11.00 **Session Cancer Genetics**
Chair: Karl Heinimann

L17: *Functional significance and clinical phenotype of non-truncating inherited mismatch repair gene variants (30min)*
Speaker: ***Minna Nyström***, Department of Biological and Environmental Sciences, University of Helsinki, Finland

L18: *FAP and HBOC: two players in one playground (30min)*
Speaker: ***Vladimir Zajac***, Cancer Research Institute of SAS, Bratislava, Slovakia

L19: *Advances in molecular diagnostics of hereditary non-polyposis colorectal cancer in Slovakia (30min)*
Speaker: ***Zdena Bartosova***, Cancer Research Institute of SAS, Bratislava, Slovakia

11.00 - 11.30 COFFEE BREAK

11.30 - 13.00 **Session Tumor cell signaling and cell death**
Chair: Josef Jiricny

L20: *Cell adhesion in tumor invasion and metastasis (30min)*
Speaker: ***Gerhard Christofori***, Institute of Biochemistry and Genetics, University of Basel, Switzerland

L21: *Nemosis – prospective cell based cancer therapy (30min)*
Speaker: ***Jozef Bizik***, Cancer Research Institute of SAS, Bratislava, Slovakia

L22: *Preliminary study on VEGF signalling in astroglial cell line A172 (15min)*
Speaker: ***Petra Knizetova***, Institute of Pathology, Faculty of Medicine, Palacky University, Olomouc, Czech Republic

13.00 - 14.00 LUNCH

14.00 - 15.45 **Session Carcinogenesis/Anticarcinogenesis I.**
Chair: Miroslav Pirsel

L23: *From initial DNA damage to cancer: lessons from mouse models (30min)*
Speaker: **Leonard Mullenders**, Department of Toxicogenetics, Leiden University Medical Center, Leiden, The Netherlands

L24: *Cancer prevention by fruits and vegetables; not just a question of antioxidants (30min)*
Speaker: ***Andrew Collins***, Department of Nutrition, University of Oslo, Blindern, Oslo, Norway

L25: *Cellular response to oxidative DNA damage in Saccharomyces cerevisiae (30min)*
Speaker: ***Miroslav Chovanec***, Cancer Research Institute of SAS, Bratislava, Slovakia

15.45 - 16.15 COFFEE BREAK

16.15 - 17.30 **Session Carcinogenesis/Anticarcinogenesis II.**
Chair: Minna Nyström

L26: *Modulation of laryngeal cancer incidence and progression by gene polymorphism (30min)*
Speaker: ***Krzysztof Szyfter***, Institute of Human Genetics, Polish Academy of Sciences, Poznan, Poland

L27: *Prevention of hereditary colorectal cancer (30min)*
Speaker: ***Hansjakob Mueller***, University of Basel, Basel, Switzerland

19.00 - 20.00 DINNER

20.00 **Poster session**

Scientific Programme - THURSDAY 24 August - the morning

8.20 - 9.10 Keynote lecture
Chair: Cestmir Altaner

L28: *Targeted therapy: from bench to bedside (45min)*
Speaker: ***Ivan Horak***, Research and Development, Enzon Pharmaceuticals, Inc., New Jersey, USA

9.10 - 10.40 Session Tumor - tailored therapies
Chair: Ivan Horak

L29: *Chemoprotective gene therapy (30min)*
Speaker: ***Geoffrey Margison***, Paterson Institute for Cancer Research, Manchester, United Kingdom

L30: *A possible role of dietary chemopreventive compounds in tumor therapy (30min)*
Speaker: ***Jan Sedlak***, Cancer Research Institute of SAS, Bratislava, Slovakia

L31: *Tumor regression by anti-sense therapy against Plk1 and Bcl-2 (15min)*
Speaker: ***Martin Brendel***, Universidade Estadual de Santa Cruz, Bahia, Brasil

10.40 - 11.10 COFFEE BREAK

11.10 - 12.25 Session Stem cells and cancer stem cells
Chair: Geoffrey Margison

L32: *Normal and cancer stem cells: potential implication for cancer therapy (30min)*
Speaker: ***Cestmir Altaner***, Cancer Research Institute of SAS, Bratislava, Slovakia

L33: *Cell cycle and DNA – damage response in murine embryonic stem cells (15min)*
Speaker: ***Vladimir Divoky***, Faculty of Medicine Palacky University, Olomouc, Czech Republic

L 34: *Retrovirus transduced human adipose tissue-derived mesenchymal stem cells exert strong antitumor effect (15min)*
Speaker: ***Lucia Kucerova***, Cancer Research Institute of SAS, Bratislava, Slovakia

12.25 - 13.00 Session Cancer proteomics
Chair: Jozef Bizik

L35: *Mass spectrometry analyses of the serum proteome in molecular diagnostics of cancer (15min)*
Speaker: **Piotr Widlak**, Maria-Sklodowska Curie Memorial Cancer Center and Institute of Oncology, Gliwice, Poland

L36: *„Applied Biosystems solutions for biomarkers screening and development – BIOiTRAQ and MIDAS proteomic technology"" (15min)*
Speaker: ***Zdeno Cervenak***, Applied Biosystems

13.00 - 14.00 LUNCH

Scientific Programme - THURSDAY 24 August - the afternoon

14.00 - 16.00 Young scientists present
Chairs: Jiri Lukas & Josef Jiricny

P14: *Modulation of human monocyte-derived dendritic cell maturation by BioBran (7min)*
Speaker: ***Jana Jakubikova***, Cancer Research Institute of SAS, Bratislava, Slovakia

P15: *Sialic acid expression evaluation as a marker of neoplastic transformation of thyroid gland (7min)*
Speaker: ***Pavol Janega***, Comenius University, Medical Faculty Bratislava, Slovakia

P26: *Stress-induced inactivation of transcription factor c-Myb through conjugation of SUMO-2/3 proteins (7min)*
Speaker: ***Marek Sramko***, Cancer Research Institute of SAS, Bratislava, Slovakia

P7: *Mutation screening of BRCA1, BRCA2 and CHEK2 in Slovak HBOC families (7min)*
Speaker: ***Sona Ciernikova***, Cancer Research Institute of SAS, Bratislava, Slovakia

P21: *Cyclin-dependent kinase 2 (CDK-2) expression in human melanocytic lesions as a potential prognostic marker of melanoma (7min)*
Speaker: ***Łukasz Kuzbicki***, Institute of General and Molecular Biology, Nicolaus Copernicus University, Torun, Poland

P9: *The yeast Snm1/Pso2 protein and its possible interactions (7min)*
Speaker: ***Zuzana Dudasova***, Cancer Research Institute of SAS, Bratislava, Slovakia

P20: *APC gene mutations may clinically mimic Lynch syndrome (7min)*
Speaker: ***Michal Kovac***, Cancer Research Institute of SAS, Bratislava, Slovakia

P28: *Formalin-induced fluorescence and Melan - A of cells of human melanoma (7min)*
Speaker: ***Anna Sztramska***, Institute of General and Molecular Biology, Nicolaus Copernicus University, Torun, Poland

P4: *Isothiocyanate E-4IB-induced MAPK activation, delayed transition through cell cycle and G2/M-linked apoptosis (7min)*
Speaker: ***Juraj Bodo***, Cancer Research Institute of SAS, Bratislava, Slovakia

P2: *Molecular mechanisms of zinc-induced growth inhibition in colorectal cells (7min)*
Speaker: ***Hana Andelova***, Charles University in Prague, Faculty of Medicine in Hradec Kralove, Czech Republic

P5: *Development of SNP - based method for directed HNPCC mutation screening (7min)*
Speaker: ***Maria Bujalkova***, Cancer Research Institute of SAS, Bratislava, Slovakia

16.00 - 16.30 CLOSING CEREMONY

17.00 - 18.00 European Social Fund Project Discussion Session
Innovative education programme of young creative experts in cancer research (for ESF lecturers and stipendiaries only) (60min)

20.00 GALA DINNER

Social Event

WEDNESDAY

23 August 2006

The National Park of High Tatras (Vysoke Tatry) is the pearl among Slovak natural beauties. It is the oldest and largest National Park in the Slovak Republic and with its 25 peaks higher than 2500 m above sea level provide the only mountains with an Alpine character in the 1500 km length of the Carpathian Mountains arc. The highest peak of High Tatras and at the same time of Slovakia is Gerlach (2655m a.s.l.) The natural disaster-massive windstorm considered as a hurricane hit the region in November 2004 (the wind has reached even 165 km/h in some places). The windstorm completely damaged or strongly harmed over 100 square kilometers of the forest, which means that almost one third of the park's forests were devastated. The Spis county surrounding High Tatras is similar to a Swiss canton and belongs to regions that are rich not only in natural beauties but also in unique historical monuments.

Hiking in High Tatras

The first guided tour is thought for those who like to hike in mountains. We will depart at about 7:00 am from Stara Lesna and walk to Tatranska Lomnica (about 30 minutes). Tatranska Lomnica (850m a.s.l.) is the settlement located at the south-eastern slope of Mt. Lomnicky peak. It is the usual starting point to the eastern part of the High Tatras. Here we take a cable car to Rocky Mountain-Lake (Skalnate pleso, 1751m a.s.l.). Our trip will proceed with the ride on the cable car up to the top of Mt. Lomnicky peak (2634m a.s.l.), which is the highest inhabited place in Slovakia. On the top of this peak there is the Meteorological Station, the Cosmic Radiation Research Station and the Coronal Station. After enjoying the beautiful view we continue by cable car back to Rocky Mountain Lake. Following Tatranska magistrala, we get to the Zamkovska chalet. After enjoying a light lunch we take the route back using direction to Hrebienok. On the way we pass by Obrovsky and Studenovodske waterfalls. From Hrebienok it is only few minutes by foot to Stary Smokovec, the oldest tourist - recreational area in the High Tatras. In Stary Smokovec, there will be a free time to relax, for the souvenir shopping and visit of local restaurants. This location will be our last stop at the tour from where we take the train back to Stara Lesna.

Historical Sightseeing tour

The second guided tour is thought for those who are interested in history and architecture. We will introduce you beautiful World Heritage UNESCO places. Departure by bus is planned at about 8:00 am from Stara Lesna. The town of Levoca, in the past referred to as "Slovak Norimberg" will be the first stop on our route. The Temple of St. James belongs to the biggest gothic churches in Slovakia. Apart from the temple, the master pieces of the well-known medieval woodcarver Master Pavol from Levoca present another precious cultural monument. The main altar, which is nearly 19 meters high, is the most admired art-work of Master Pavol and at the same time the highest wooden gothic altar in the world (15th century). The next sightseeing stop will be The Spissky Castle (Spissky hrad).

The Castle represents an evidence of architectural development of this region in the 12th-18th century and with its area of more than 40 000m2 belongs to one of the largest castles/ruin complexes in the Central Europe. From inside the castle we can realize its wonderful location and beautiful architecture, which is worth the effort to climb the castle's hill. From the Spissky Castle we can see the towers of the Cathedral in Spisska Kapitula. The Roman-Catholic church has had a seat in this independent village since the middle 13th century. Spisska Kapitula is today a municipal cultural reservation and the St. Martin Cathedral is the dominant cultural monument in the village. After taking the break for lunch in Levoca our travel will proceed to Kezmarok which has been in the past the second biggest town of Spis region. We will visit a Municipal castle located directly inside the town and unique churches - the Holy Cross basilica (gothic/renaissance), the Wooden articular church (baroque) and the New protestant "red" church (eclectic style). In the late afternoon, full of unforgettable impressions, we will return by bus to Stara Lesna.

ACKNOWLEDGEMENTS

The Organizing committee wishes to express its gratitude to the following sponsors for their support of the International Symposium Cancer 2006: From biology processes to tumor-tailored therapy, which would be not possible without their generous support.

General Partner

SLOVAK CANCER RESEARCH FOUNDATION

Partners

European Social Fund

JOLLY JOKER®

SIEMENS medical

Applied Biosystems
an Applera Corporation Business

We make it visible.

Trigon®

. . . riešenie pre vaše laboratórium

príprava vzoriek

analýza vzoriek

skladovanie vzoriek

TRIGON - tradičný partner rôznych odborných podujatí

Informujte nás o vašich pripravovaných konferenciách, zjazdoch alebo seminároch radi ich podporíme a prezentujeme sa. Napíšte nám na

mail@trigon-plus.sk

Tešíme sa na stretnutie s vami.

- centrifúgy
- laminárne boxy, digestory
- chovné boxy pre laboratórne zvieratá
- chladiace, mraziace a hlbokomraziace boxy
- termostaty, sušiarne, autoklávy, vodné kúpele
- boxy s anaeróbnou atmosférou
- laboratórne umývacie a dezinfekčné automaty
- PCR cykléry, PCR boxy, hybridizačné piecky
- mikroplatničkové fotometre, nefelometre, flurometre, luminometre
- mikroplatničkové dávkovače, premývačky
- bio-imaging a analýza gelov
- koncentrátory vzoriek, lyofilizátory
- počítače kolónií a inhibičných zón
- pipety FINNPIPETTE

novinky a zaujímavosti roku 2006

MULTIDROP COMBI
automatický dávkovač pre mikrotitračné platničky 96, 384 a 1536 jamkové a deep well platničky 6,12,24,48 jemkové

Thermo ELECTRON CORPORATION

APPLISKAN
multifunkčný filtrový reader pre formát platničiek 6 – 384 jamiek
Fluorescencia, luminiscencia, absorbancia, FP, TRF, BRET, FRET, TR-FRET

SYNGENE

G:BOX bio-imaging
nový typ dokumentačných systémov SYNGENE
Rada kamier pre fluorescenčné a chemiluminiscenčné aplikácie
flexibilný stavebnicový systém

LANCER

BIOTRACE INTERNATIONAL

NOVUS
elektronické programovateľné pipety
jedno aj osemkanálové

TECNIPLAST

TRIGON, s.r.o. Štefunkova 13 821 03 Bratislava email mail@trigon-plus.sk http://www.trigon-plus.sk
tel.: 02 635 31 241, 0905 707 597, 0905 728 896 tel./fax: 02 635 31 240

- **QIAGEN** - the leading provider of **innovative technologies and products** for preanalytical sample preparation and molecular diagnostics solutions.
- A comprehensive portfolio of **more than 500** proprietary, consumable **products** and **automated solutions** for sample collection, and **nucleic acid** and **protein** handling, separation, and purification.
- **Diagnostic kits**, **tests**, and **assays** for **academic** research, **pharmaceutical** and **biotechnology** companies and **diagnostics** laboratories; for **forensics, animal** and **food testing,** and **pharmaceutical process control.**

- **OPERON** - since 1986 the global market leader in custom **oligonucleotide synthesis**; driven by the best customer service, consistent quality, and cutting edge design technologies. Operon provides a full range of mass-customized synthesis services in an industrial setting, with the added value of made-to-stock products.
- **Synthetic DNA** including **dual-labeled probes** (with large number of modifications), **longmers,** and **genome oligo sets for microarray** to life science researchers.

- **MINERVA BIOLABS** - the biotechnology company for the development of detection and elimination kits for the **control of mycoplasma, bacteria and viruses** in cell cultures and biopharmaceuticals; and specialized kits and reagents as PCR diagnostics of respiratory tract infections and for the **detection of legionella in water.**

- **WEALTEC** - the supplier focusing on life science research **devices** and **related consumables** for the global market, offers advanced, innovated and high-quality products with the best possible service and ensures great and reliable product quality.
- Product range – **image system series, horizontal and vertical electrophoresis system, basic laboratory apparatus.**

BIO-CONSULT Slovakia s.r.o.
Ružová dolina 6
821 08 Bratislava 2
SLOVAK REPUBLIC
tel./fax: **+421 2 50 221 336**
+421 903 471 595
bio-cons@cdicon.sk
www.bio-consult.sk

CLOSE HARMONY FRIENDS
a' cappella vocal group

CLOSE HARMONY FRIENDS
a' cappella vocal group

MC MICROCOMP
- Computersystém s.r.o.

Medial Partners

Rádio Slovensko | Slovenský Rozhlas 1

Nezávislý strednoeurópsky mesačník o ľuďoch, svete a spoločnosti
DIMENZIE
ČASOPIS, KTORÝ NEKĹŽE PO POVRCHU


LOMNICKY PEAK
STARY SMOKOVEC
TATRANSKÁ LOMNICA
RECREATIONAL AREA OF STARÁ LESNÁ
CAMP
KONTART
CC ACADEMIA
FOTBAL
MERIDIA
LESNÁ
ZBOJNÍCKA KOLIBA
TAVERNA MONTIS
VILLAGE STARÁ LESNÁ
BUS STOP
RAILWAY STATION
TENNIS COURT
POOL
EXCHANGE OFFICE
OBSERVATORY
SIDE-WALK WAY
CONGRES CENTER

GOOD BYE AND HAVE A SAFE TRIP HOME!