

# EACR Council Members

The EACR Council comprises representatives of countries with a significant number of EACR members. Here we invite councillors to highlight local issues that are of interest to us all

## Report from Austria

In November 2007 a new Comprehensive Cancer Centre on Personalized Cancer Medicine was established at the Innsbruck Medical University. The goals of the centre, labelled "ONCOTYROL", is to harness the benefits of the molecular revolution in cancer medicine by translating genomic and proteomic research into innovative, individualized and cost-effective approaches for cancer prevention, diagnosis and treatment. A consortium of researchers at the Biomedical Campus Innsbruck together with national and international academic and industrial partners has joined efforts to develop and feed a pipeline of basic, translational, clinical and decision-analytic cancer research.

With regard to the substantial scientific strengths and expertise in breast and prostate cancer, chronic myeloid and lymphocytic leukaemia, these paradigm malignancies were chosen as the primary targets of research. Major goals are (i) To identify, develop and validate biomarkers for identifying individual cancer patients or patient cohorts that are most likely to benefit from targeted anti-cancer therapies, and (ii) to develop novel drugs and therapeutic approaches for targeting "addictive" pathways in the respective malignancies directed by genomic, proteomic or metabolomic biomarkers.

Five research areas have been established:

Area 1: Mechanisms controlling tumour growth and anti-tumour immunity

Area 2: Bioanalytics and diagnostics

Area 3 Biomarker-guided cancer diagnostics, therapy and prevention  
Area 4: Decision-analytic outcome modelling, health technology assessment (HTA) and health economics  
Area 5: Bioinformatics and systems biology.

Core facilities include technology platforms for genomic, epigenetic and proteomic profiling, SNP analysis and flow cytometry, a bioinformatics unit, tissue and serum banks, animal testing facilities and a clinical trial centre

The centre which is embedded in a large biomedical campus in close proximity to the three local universities and to the University clinic will be supported by a special research grant of app. 30 Million Euros for 4 years.

The clinical research activities of the ONCOTYROL Centre are accompanied by a centre for basic cancer research on Cell Proliferation and Cell Death in Tumours established by the University and the Medical University of Innsbruck. This centre is acknowledged and co-financed by the Austrian Research Funds (FWF) as a "Special Research Area (Spezialforschungsbereich)" after reviewing by an international expert panel. The centre combines the activities of laboratories from the Medical University of Innsbruck, the University of Innsbruck, the neighbouring Max-Planck Institute for Biochemistry in Munich, the Max F. Perutz Laboratories, Vienna, and the University Hospital Salzburg. The centre is focused on molecular mechanisms underlying the interplay of proliferation and apoptosis, among projects concerned with pathways

regulating cell proliferation, cell cycle control, survival and apoptosis and adhesion signalling in tumour cells, and studies on T cell activation thresholds which should provide a better understanding why the immune system apparently fails to eliminate tumour cells. The Special Research Area is planned for a total grant period of 10 years with intermittent evaluations every three years. Research at this centre is supported by the FWF with a grant of 6 million Euros for the next three years.

This report has been focussed on Innsbruck because it profited from recent major funding decisions in cancer research. It is understood, of course, that internationally acknowledged cancer research is going on in other Austrian centres as well, especially in Vienna, Graz and Salzburg. A major stronghold in basic and translational life sciences including oncology has developed at the Vienna Biocenter which includes - among others - institutes like the Max F. Perutz Laboratories, the Institute of Molecular Pathology (IMP), and the Institute for Molecular Biotechnology (IMBA). Please visit the home page at [www.viennabiocenter.com](http://www.viennabiocenter.com) to learn more about the activities going on there.

*Hans H. Grunicke ( Innsbruck, Austria)*

## Organisation of cancer research funding in Switzerland

Funding of cancer research in Switzerland builds on two major public foundations, the Swiss National Science Foundation (SNF) and Oncosuisse, which represents the umbrella organisation of the

Swiss Cancer League and their local suborganisations in the various Kantons, and Cancer Research Switzerland. Both organisations primarily support individual scientists, but programmes to enable the formation of integrated national research activities exist as well.

The SNF was inaugurated in 1952 as a private foundation and today represents the most important public promoter of scientific research in Switzerland, with around 7000 scientists being supported every year by about 500 million Swiss Franks. As an instrument of the government, the main focus is to foster basic research in all scientific disciplines, ranging from philosophy to nanoscience and biomedicine, including cancer research and industry-independent clinical research activities. Special attention is also paid to the support and scientific education of young investigators. In addition, improving the overall conditions for the progress of research in Switzerland on an international level and promoting the dialog between the society, politics and science, represent a major sociological task [www.snf.ch/d/ueberuns/seiten/default.aspx](http://www.snf.ch/d/ueberuns/seiten/default.aspx)

Promoting specifically cancer research is a central task of the Swiss Cancer League. Founded as Society for Cancer Research more than a century ago, donations have always been used to financially support basic cancer research linked to clinical application as well as activities for the treatment of cancer and for epidemiological studies. Fostering the various disciplines of cancer research is thus the oldest tradition of this foundation, which invests more than 10 million Swiss Franks per year. As with the SNF, promoting the progress of Swiss cancer research on an international level and fostering the dialogue between the various public and sociological domains are major objectives too. For more information and a summary of the independent research activities and funded projects in Switzerland please contact [www.swisscancer.ch/research](http://www.swisscancer.ch/research)

*Uwe Zangemeister-Wittke*

## High-tech research in Romanian medical universities

Romania integrates into international research and development programmes. Through a National Plan for Research, Development and Innovation, the Romanian National Authority for Scientific Research intends, for the next four years, to create knowledge, in the sense of achieving leading edge scientific results, competitive at the global level, in order to increase the international visibility of the Romanian research and to subsequently transfer the results into medical practice. The recent implementation and funding opportunities initiated and established by this plan have thus boosted research in major Romanian medical universities.

In order to give researchers the possibility to work using “state-of-the-art” equipment, the benefit of adequate management and to be permanently connected to socio-economic requirements, the Capacities Programme has been set up as a leading infrastructure programme for several centres of excellence throughout the country.

One such example is the Research Centre of Gastroenterology and Hepatology, Craiova. Romania won financial support of over 0.5 million

EUR for a single project entitled Platform of Interdisciplinary Research in Advanced MicroEndoscopy Imaging Devices (PYRAMID). As digestive cancers are a major health problem in the world, being in first place in the tumour pathology, the objectives include the creation of a modern platform of digestive imaging based on latest generation endoscopic devices for early detection of cancers: autofluorescence imaging, optical coherence tomography and confocal laser endomicroscopy. The imaging module will be supported by the acquisition of complex pathology and molecular biology equipment (single layer liquid cytology, FISH equipment, DNA sequencer, etc.), while all the acquired information will be integrated in several “store-and-forward” databases by the IT department.

The creation of basic research infrastructures will thus allow the researchers of the University of Medicine and Pharmacy Craiova to work with high-tech devices and equipments, supporting Romania’s participation in national and international research and development programmes by integrating them within excellence networks.

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*LEFT TO RIGHT: Mihaela Calita, Daniela Burtea, Dan Gheonea, Monica Busoi, Adrian Saftoiu, Sevastita Iordache, Ana Maria Ioncica*

## An overview of Cancer Research in Croatia

Cancer research in Croatia is carried out at its several universities, in some hospitals and in a few research institutes. The cancer research community consists of several hundred clinicians and two to three hundred dedicated researchers (many are members of EACR). Most of them are concentrated in the Croatian capital Zagreb, and a substantial proportion of Croatian cancer research is done at the Institute Rudjer Boskovic and the University of Zagreb.

The research is mainly financed by the Ministry of science, education and sports, and the Ministry of health. Researchers are encouraged to participate in international projects, but their role is still minor. Greater international contribution is achieved by the fellowships and donations from abroad.

Ministry of science, education and sports is currently funding 67 cancer research projects (national grants approved in 2006). More than half of them deal with particular cancer types, and some cancers are addressed by several projects (e.g. leukemia, breast, ovarian and thyroid cancers etc.). These projects are mostly performed as

clinical research. The other projects mainly investigate various aspects of cancer development/therapy in general (such as signal transduction, apoptosis, angiogenesis etc.), and they are usually done in research institutes. But there is no sharp division between the two groups, as in many projects research institute investigators work together with clinicians from several hospitals.

In recent years, Croatian government has introduced several programs of early cancer detection, and begun to realize promises of increased funding for oncological education and cancer research.

*Sonja Levanat  
Council Member for Croatia*

## Report from Ukraine

R.E.Kavetsky Institute of Experimental Pathology, Oncology and Radiobiology of the National Academy of Sciences of Ukraine is the largest scientific and research center in Ukraine. It's activity lies in the development of the fundamental problems of experimental and clinic oncology.

The main directions of the Institute are the determination of the molecular aspects of the tumour drug

resistance development, as well as of the epigenetic approaches of its modification taking into account the influence of the surroundings factors; the determination of the molecular and cellular markers of the initiation, promotion and progression of malignant tumours aimed at the elaboration of early - and differential diagnostics methods of tumor disease; study of the biology of a cancer cell and its microenvironment in the development of the molecular and cellular mechanisms of oncogenesis, with the aim of elaboration of the correction methods of homeostasis disturbances and tumor diseases; study of the role of endogenic and exogenic factors in the formation of malignancy as well as the search for the effective ways for the cancer diseases prevention; elaboration and implementation of the nanotechnologies in the malignant disease therapy and investigation of their influence on the normal and malignant cell metabolism; elaboration, study and implementation of the new highly efficient methods of the chemo- and biotherapy of cancer as well as drugs and methods leading to the enhancement of anti-tumour therapy effect and the diminishing of its toxicity.

*Prof. Vasyl Chekun, Ukraine Council Member*

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