Triplet



The Quarterly of the Faculty of Biochemistry, Biophysics and Biotechnology, JU

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NEW LABORATORY





Welcome in the laboratory. From left: Card. Franciszek Macharski, prof. Michał Tendera, dr Justyna Drukała, prof. Aleksander Koj, prof. Mariusz Ratajczak, prof. Karol Musioł

Rector of JU looking at the cell culture in the company of dr. I. Drukała

The Laboratory of Cell and Tissue Engineering in the Department of Cell Biology was officially established on November 29th, 2010. It is headed by Dr. Justyna Drukała. The lab came to be thanks to structural funds from the Malopolska Biotechnology Centre (modernization of facilities) and Molecular Biotechnology for Health (purchase of equipment) projects. It now counts with one of the most modern laboratories in Poland equipped for working with human tissue cultures for clinical use and is the most experienced in the use of skin cells to treat burns and other wounds. The new laboratory is able to ensure high standards of air purity and sterility of the facilities and equipment which contributes to safety both of the biological materials being prepared for transplants as well as for the lab personnel.

The first lab, which was a division of the Department of Cell Biology, operated in the L. Rydgier Regional Specialist Hospital in Krakow from 1999 to 2007. Afterwards, clinical trials were conducted in the Department of Transplantology of the Jagiellonian University's Medical School. During the course of these years, collaborations were established with many institutions. The most long-standing of these are

collaborations with Prof. Jacek Puchała from the University Children's Hospital in Krakow-Prokocim and Dr. Kazimierz Cieślik, head of the Burns and Plastic Surgery Ward in the Rydgier Regional Specialist Hospital in Krakow.

In 2009 funds were obtained for a project to treat deep skin wounds using the Integra DRT matrix and for a project investigating VSEL stem cells and their therapeutic potential for skin regeneration. Our main partners in these projects are Prof. Jacek Puchała, Prof. Mariusz Ratajczak, (national coordinator of the *Innovative Methods for Using Stem Cells in Medicine* programme) and Dr. Andrzej Krajewski (head of the West-Pomeranian Centre for the Treatment of Serious Burns in Gryfice).

What does the procedure of growing skins cells for a transplant like?

A small sample of skin, about 0.5 cm2, is collected from the patient. This sample is transferred to the laboratory and then undergoes an enzymatic process to isolate individual cells which are then grown and multiplied outside of the patient's body. In this fashion, in the space of 10 days, it is possible to grow enough material to cover a 200 cm2 wound from the small initial sample. The cells are then collected

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NOBEL

We wish you a Merry Christmas – the Faculty's Christmas party Publications Committee

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Dr Justyna Drukala reading congratulation letter from local authorities



from the culture dishes and mixed with a tissue adhesive commonly used in surgery. This "cell gel" is then transported to the operation room and applied to the wound.

Cultures of cartilage tissue and soon possibly other types of tissue will also be grown in our laboratory.

Dr. Justyna Drukała

Guests going to the Laboratory. From the left: prof. Zbigniew Madeja, prof. Mariusz Ratajczak, dr Justyna Drukała, prof. Michał Tendera

SUBSIDIES FOR TEACHING INFRASTRUCTURE

A joint project of four faculties of the Jagiellonian University (Biology and Earth Sciences; Chemistry; Physics, Astronomy and Applied Computer Science; and the Faculty of Biochemistry, Biophysics and Biotechnology) to the Malopolska Regional Operational Programme for the years 2007-2013 was approved. The project entitled "Modernisation of the Teaching Infrastructure in Pure and Natural Sciences in the First Cycle Study Programmes" is worth 5.4 million Polish zloty, including approximately 660 thousand zloty destined for our Faculty.

Another joint undertaking, an project submitted by the four above-mentioned Faculties of the Jagiellonian University, submitted within the framework of the Operational Programme Infrastructure and Environment 13.1 "Higher Education Infrastructure" was positively evalu-

ated and approved for funding. This application, amounting to approximately 65.5 million zloty (6.5 million for our Faculty) embraces almost 700 pieces of scientific apparatus for teaching purposes and the construction of a Natural Sciences Education Centre. Our Faculty will acquire over 200 scientific instruments and equipment for teaching purposes. It will also receive funds for adapting one of the seminar rooms to the needs of biochemistry and biophysics wet labs. The equipment for student labs is scheduled to be purchased between 2010-2012.

Both grants will enable our Faculty to significantly modernize and expand the teaching infrastructure.

Prof. J. Dobrucki

MARIE CURIE ACTIONS – TRANSFER OF KNOWLEDGE

"Functional analysis of new acute phase proteins" (acronym: ACUP, Marie Curie Actions – Transfer of Knowledge, FP6, No. 042586)

Four researchers from the Faculty of Biochemistry, Biophysics and Biotechnology – Hanna Rokita (acting as coordinator), Jolanta Jura, Joanna Cichy and Joanna Bereta – were responsible for research in the project "Functional Analysis of New Acute Phase Proteins" which was carried out in collaboration with three partner institutions in Germany, Great Britain and Italy.

Their work aimed to study the role that the recently discovered acute phase proteins mimitin, MCPIP and GADD45alfa play in inflammatory processes. These novel proteins are regulated by proinflammatory cytokines, but it also turned out that they themselves play an important part in regulating inflammation. Studies on ADAM17, a member of the ADAM (A Disintegrin And Metalloproteinase) family and regulator of immune cell membrane receptor levels and activity, revealed its important role in B-cell mediated immunity. Furthermore, the researchers studied the role of cysteine proteases



in the regulation of activity of the chemotactic factor chemerin. They also proposed a new phage display method for obtaining monoclonal antibodies (mAb). Analysis of the involvement of mimitin and MCPIP in cancer was done using human neuroblastoma cell lines and a mouse model of tumor growth.

The project also included lectures for the Faculty's students given by four foreign visiting scientists. The results of the research conducted within the framework of the ACUP project were also incorporated in classes for FBBB students taught by Polish scientists participating in the project.

Thirteen fellows from abroad who collaborated in the project spent a combined total of 60 months at the Jagiellonian University. Eight Polish researchers spent a combined total of 33 months in partner institutions to learn new methodology. As of today the project has resulted in the publication of 8 experimental papers and the presentation of 30 communications at scientific conferences. Nine meetings were organized during the course of the project of the project during the course during the course of the project during the



ect. Studies for this project are being continued. Data supported by the ACUP project has allowed us to apply for further grant support. The ACUP website is available at:

http://biotka.mol.uj.edu.pl/acute/index.html

Marie Curie... cont. from p. 2

Participants of the meeting, from the left up: dr W. Widłak, Łukasz Skalniak, dr Alexandra Chalastanis, Piotr Widerski, dr Krzysztof Murzyn, prof. Jolanta Jura, dr Joanna Cichy, prof. Aleksander Koj, dr Mirela Boca, dr Stephen Yarwood, dr Vito Pistoia, prof. Hanna Rokita, dr Paulina Węgrzyn, prof. Joanna Bereta.

GRANTS

Obtainig recombinant inhibitory monoclonal antibodies specific to TGF alfa by means of phage display technique, dr Monika Bzowska

Contribution of HSP90 in recognition of molecular pattern by TLR receptors – mechanism and consequences for immunological system, dr Małgorzata Bzowska

Mechanisms regulating local and systemic synthesis and function of chemerin, dr hab. Joanna Cichy

Establishing methods of nano-encapsulation of clozapine and its targeting at the dopamine D2 and serotonin 5-HT2A receptors hetero-dimers, prof. dr hab. Marta Dziedzicka-Wasylewska

New concept of recognition of apoptotic neutrophils by macrophages – complexes of HSP27 as an independent 'eat me' signal and its consequences for immunity, dr Krzysztof Guzik

Investigation of spread tracts and etiology of skin infections caused by staphylococci: Staphylococcus aureus, S. intermedius, and S. pseudintermedius for optimation of diagnostic processes and reduction of health risks, dr hab. Jacek Władysław Międzobrodzki

Substrate specificity and transport inhibition of chlorophyll-derived xenobiotics, dr hab. Krystyna A. Urbańska

Studies on factors engaged in host-specific colonization and virulence of Staphylococcus aureus strains, dr Benedykt Władyka

Role of Nrf2 in prevention of ochratoxin-A-induced kidney damage, prof. dr hab. Józef Dulak, Ph.D. project

Development of new photosensitizers of natural origin for photodynamic therapy, dr hab. Leszek Fiedor, Ph.D. project

Effect of heme oxygenase-1 on differentiation of satellite cells: role of miRNA, prof. dr hab. Alicja Józkowicz, Ph.D. project

Molecular and enzymatic properties of thiamine phosphate synthase from Saccharomyces cerevisiae and its potential role under conditions of oxidative stress, E. Kowalska, Ph.D. project

Investigation on antioxidant function of oxidized and reduced form of plastoquinone in vitro and in vivo, dr hab. Jerzy Kruk, Ph.D. project

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PROFESSORSHIPS

Prof. Zbigniew Madeja

On November 22nd, 2010, Zbigniew Madeja, head of the Department of Cell Biology, received the scientific title of professor of biological sciences, which had been granted to him on October 7th. Prof. Madeja embarked on his scientific career in 1985 when, after finishing his studies in biology, he commenced doctoral studies at the Department of Animal Biochemistry in the Jagiellonian University's Institute of Molecular Biology under the direction of Prof. Andrzej Klein. After defending his doctoral thesis, he was employed in 1991 in the Department of Cell Biology (DCB), then headed by Włodzimierz Korohoda. In 2003 he obtained his

Prof. Zbigniew Madeja

habilitation and in 2006 became head of that same department.

During this period he also worked as a visiting researcher in the Institute of Pathology of the University of Bern and in the Department of Microbiology, Pathology and Immunology of the Karolinska Institute in Stockholm.



Prof. Alicja Józkowicz receives her nomination from the President Bronisław Komorowski

Prof. Madeja's group conducts both primary research as well as applications development in the following fields:

- migration mechanisms of healthy and tumorous cells (measurements of cell motility and studies of cellular cytoskeleton, intercellular communication and expression of adhesive proteins)
- cellular reactions to substrate topography
- mechanisms of electrotaxis (cell reaction to electric fields) and chemotaxis
- the influence of the cell's oxidation state and thioredoxin reductase activity on the migration of animal cells
- applications of polyisoprenoid derivatives as drug carriers and metabolism regulators
- studies into the phenotypic transformation of fibroblasts into miofibroblasts and the role of this process in the respiratory pathway changes induced by bronchial asthma
- innovative applications of stem cells in medicine

Prof. Alicja Józkowicz

On November 23rd, 2010 Alicja Józkowicz obtained the title of professor of biological sciences. Prof. Józkowicz worked as a volunteer with the Bird Biology Group in the Jagiellonian University's Institute of Environmental Biology since 1983. After completing her M.Sc. studies in 1991 with a major in biology, she began working in the Jagiellonian University's Department of Evolutionary Immunology under the direction of Prof. Barbara Płytycz and later in the Department of Clinical Biochemistry of the Jagiellonian University's Medical College headed by Prof. Aldona Dembińska-Kieć. She defended her doctoral thesis in 1997 and obtained her habilitation in 2005. She spent time as a post-doctoral fellow in Baylor College of Medicine in Houston and in the Medical Uniersity of Vienna. In 2003 she received a position in the Faculty of Biochemistry, Biophysics and Biotechnology and since 2005 she has worked in the Department of Medical Biotechnology headed by Prof. Józef Dulak. Prof. Józkowicz's research is centered on the mechanisms of angiogenesis, especially on the role of oxidative stress-regulatory enzymes in the differentiation and functioning of endothelial cells. Recently she has focused mainly on the role of heme oxygenase-1 in tumour genesis and cellular growth processes.

HABILITACJE

On October 12th, 2010, the Council of the Jagiellonian University's Faculty of Biology and Earth Sciences accepted Dr. Jolanta Sroka's habilitation thesis entitled *The effect of organotin and organolead compounds on the migration of animal cells and gap junctional intercellular communication*. Dr. Sroka is a member of the Department of Cell Biology in our Faculty.

Chemical substances, including organic metal derivatives used in industry, agricultural chemistry, food processing and the manufacture of daily use products, are leading to increased air, soil and water pollution. This in turn is responsible for an ever increasing number of cellular process disorders in living organisms including those related to cell migration and intercellular communication through gap junctions. As a result, this can lead to many pathological changes in animal and human tissues and organs and consequently to the onset of many diseases. The motility of cells is inherent to many processes occurring in living organisms such as embryogenesis, regeneration and wound healing and defence reactions of the immune system. Gap junctional intercellular communication, on the other hand, provides multicellular organisms with the capability to precisely control homeostasis, growth, and cell



Dr Jolanta Sroka

differentiation and death. Structural and functional gap junction disorders are a cause of atherosclerosis, peripheral neuropathy, psoriasis, infertility, cataracts and may also lie at the heart of cancerogenesis.

The results of the work presented in Dr. Sroka's thesis unequivocally show that tin and lead organic derivatives at doses significantly below the lethal limit modify cell morphology, migration, chemotaxis, intercellular communication through gap junctions, and actin and microtubular cytoskeleton organization. They may also perturb numerous cellular signalling pathways by effecting the activity of protein kinase C thus leading to various diseases.

F 1000

The core service of Faculty of 1000 (F1000) identifies and evaluates the most important articles in biology and medical research publications. Scientists and clinicians from F1000 rate the best of the articles they read and explain their importance. Launched in 2002, F1000 now numbers more than 10,000 experts whose evaluations form a fully searchable resource identifying the best research available. On average, 1500 new evaluations are published each month. This corresponds to approximately the top 2% of all published articles in the biological and medical sciences. http://f1000.com/

PhDs

Joanna Kisielewska Influence of tyrphostins AG1024 and SU1498 on autocrine growth and survival of prostate cancer cell line DU145, supervisor: prof. dr hab. Andrzej Klein, October 22nd

Stanisław Malicki *Differential changes in selected* cytokines and proinflammatory enzymes in colorectal cancer, supervisors: dr hab. Amalia Guzdek, prof. dr hab. Piotr Konturek, December 7th

Paulina Chorobik Establishing a method for the increasing the effectiveness of tumor therapy through the overexpression of the endogenous protein SipB; supervisor: dr hab. Joanna Bereta, December 21st

MINISTER OF EDUCATION'S AWARD FOR SCIENTIFIC ACHIEVEMENT

The list of the more than one thousand recipients of the Minister of Science and Higher Education's scholarship for scientific achievement for the year 2010/2011 was declared on December 9th, 2010. The group of 102 Jagiellonian University students included five from our Faculty. They are the following students majoring in biotechnology: Adrian Grzybowski, Katarzyna Wiktoria Kliza, Grzegorz Majka, Anna Oszmiana and Ewa Rojczyk.

The requirements for receiving the Minister's award include a high grade point average (above 4.5/5 in the classes coursed so far) as well as scientific achievements and activities such as participation in scientific conferences, internships, conducting scientific research, participation in scientific associations, publications, essays and communications beyond those required by the study programme. Congratulations to all of this year's recipients!

MOLECULAR BIOTECHNOLOGY FOR HEALTH PROJECT – COMMENCEMENT OF CONSTRUCTION WORKS FOR THE NEW LABORATORY ANIMAL FACILITY

Construction work on the new laboratory animal breeding facility in what were previously storage areas in the basements of our Faculty's building were begun in the last quarter of 2010. The project is being carried out by the winner of a tender for the project, Kompleks Construction Co., while Raciborskie Investment Co. is acting as supervising inspector for the project. According to the project's calendar, the facility should be completed in April of 2011. The new laboratory animal facility will allow us to carry out research with all types of transgenic mice. The coordinator responsible for the project is Prof. Alicja Józkowicz.

A Vevo-2100 ultrasound imaging system manufactured by VisualSonics was delivered and installed in December. The device is destined for intravital, non-invasive imaging of organs and for haemodynamic measurements in small animals including mice, rats and rabbits. It is capable of providing very high resolution images (greater than 30µm). With this ultrasound system one can, for example, assess cardiac function and blood flow in large vessels, measure tissue perfusion and visualize vascular architecture (in skeletal muscles, the heart, tumours, etc.) or assess tumorous growths. It can also be used for intravital measurement of the expression of certain proteins. The system may also be of use in monitoring the development of pregnancy in laboratory animals, including identification of lethal mutants, monitoring organ growth (e.g. vascular system, nervous system) in the stages of embryo development and assessing organ maturation (including the brain) in neonates. It can also be very helpful when injecting cells, genetic material or drugs into specific organs in laboratory animals.

A tender was announced in November for the delivery and installation of an HPLC analytic instrument, an HPLC preparation system, a diode-array absorption detector, a diode-array fluorescence detector and for a system for monitoring culture parameters in phytotronic cells with accessories and software. These instruments will be purchased for the Plant Biotechnology Laboratory which is coordinated by Prof. Halina Gabryś and Asst. Prof. Leszek Fiedor.

A special issue of our quarterly focusing entirely on the Molecular Biotechnology for Health project was published in December. This issue presents the tasks completed so far as well as giving a detailed description of the purchased instruments and scientific research capabilities which have been made possible.

Aneta Pazik Prof. Alicja Józkowicz

The Molecular Biotechnology for Health project is co-financed by European Union funds, the European Regional Development Fund, and the Innovative Economy Operational Programme for 2007-2013.



THE INTELLIGENT LIFE OF PLANTS

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NPQ

Contrary to popular opinion, plants are far from being passive organisms. As recent research has shown, they possess a 'nervous system', see, feel, are able to remember information derived from their surroundings and in their own way are able to 'think'.

The publication which led to these conclusions appeared in the most prestigious 'plant' journal – The Plant Cell. Its results have resounded not only within the national press but also internationally. It has turned upside down our previous knowledge on the subject of plants. It proves that they in fact lead a far more complicated life than we had formerly believed.

For about a decade now it has been known that plants are able to react to stress factors, such as excessively intense light, in a systematic way. This means that various parts of a plant are able to communicate with each other and react accordingly to stimuli. If a part of the leaves is illuminated by an excessively strong light, then the remaining leaves receive a signal about the approaching danger and prepare themselves appropriately for the strong dose of light. Yet until now it was not known how the various parts of a plant convey this information to each other. Initially it was thought that this was by means of reactive forms of oxygen or hormones. However, present research conducted on a model plant, Arabidopsis thaliana, has shown that the answer lies in fast electrophysiological signals which dissipate in the area of the leaf along 'nerves', i.e. along conductive fascicles. As it turns out plants are able to differentiate the hue of light falling on them and remember the information about past stress. All of this leads to an increased chance of survival when a similar situation repeats itself in the future. This process may be compared to immunological memory in man.

A dense field of grain or the crowns of trees as well as in-

clement variable weather mean that leaves are often not positioned for optimal light illumination. Therefore, a fast and effective exchange of information from the illuminated leaves also ensures better adaptation of the entire organism. This is an exceptionally elegant system, which has evolved specifically in plants.

Research into the nervous system and memory in plants is not just primary research. Two patents have already been issued in connection with these findings.

Jerzy Kruk

Magdalena Szechyńska-Hebda, Jerzy Kruk, Magdalena Górecka, Barbara Karpińska, Stanisław Karpiński, Evidence for Light Wavelength-Specific Photoelectrophysiological Signaling and Memory of Excess Light Episodes in Arabidopsis, Plant Cell, 2010.

You are invited to visit the website www.kampus.uj.edu.pl where it is possible to take a virtual tour of the Faculties located on the "Campus of the 600th Anniversary of the Jagiellonian University Revival" which includes our Faculty. An extensive 3D presentation permits the virtual visitor to familiarize himself with the location of the various buildings, their appearance and interior. One can tour the lecture halls, laboratories, library and administrative offices. The most interesting places to see include the television studio, sound studio, the Faculty of Management and Social Communication's hall of mirrors and our Faculty's laboratories. This virtual presentation also includes a narrator who presents interesting facts

A VIRTUAL TOUR OF THE CAMPUS

about the faculties and objects such as, for example, about our sundial. Here one can also find maps of the buildings and links to the websites of the various Faculties as well as to similar virtual tours of the Auditorium Maximum and Collegium Novum. We recommend the visit wholeheartedly!





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MYGEN

XIII OASSB in Krakow

The Biotechnology Student's Association Mygen has taken quite a challenge upon itself. In November 2011 we will organize the XIII Polish Undergraduate Biotechnology Students' Seminar (OASSB) along with the III International Student Conference of Biotechnology (ISCB).



Posters. From the left: Mateusz Tomczyk, Wojciech Senkowski Phot. Mateusz Kucharczyk



Presentation given by Jakub Zimoch (III year of biotechnology) Phot. Jarosław Surkont Where did this idea come from? Between November 19th and 21st, members of our Association participated in the XII OASSB and II ISCB in Wroclaw. Our fourteen person delegation included both speakers and poster authors. The entire conference was held in English and divided into four thematic sessions: Red, White and Green Biotechnology and Bioinfor-

matics. The best speaker and most attractive poster presentation were selected on the last day through a secret ballot and an evaluation by the awards committee. Unfortunately, this year we did not receive an award. Nevertheless, at the same time a plenary meeting of the Undergraduate Biotechnology Students' Association took place with the participation of Mygen's president, Barbara Zięba, who expressed Mygen's willingness to host the XIII OASSB in Krakow. This proposal received the general consensus of the remaining members. Thus, we came back from Wroclaw without any awards, but we certainly did not come back with our hands empty. The goal we have set for ourselves is to organize the best conference yet, fully in keeping with international standards.

Katarzyna Dziedzic

"Numbers-Computers-Life"

For the first time in history, the Jagiellonian University's Mygen Biotechnology Students' Association, the Mathematics Students' Association and the Computer Science Students' Association are organizing the 1st Mathematics-Computer Science-Biology Students' Conference entitled "Numbers-Computers-Life". The conference will be held from March 18th-20th, 2011 in the JU's Faculty of Mathematics and Computer Science building. The planned lectures and discussion panels will deal with topics in bioinformatics, molecular modelling and applications of mathematics and computer science in the biological sciences. This will be a nation-wide conference, and it is sure to succeed through the combined efforts of the biotechnology, mathematics and computer science students. Information about the speakers and topics is due to appear soon on the website which is under construction. We are hoping that this will not be our Association's last interfaculty project in the near future.

We would also here like to thank Prof. Marta Pasenkiewicz-Gierula who has agreed to function as scientific patron for our conference.

We extend a cordial invitation to you for March!

Barbara Zięba



At the beginning of the academic year we organized an integration training weekend for younger students of biophysics. Participants in "Mountain Integration of Biophysicists" (GIB10) included not just students from the Faculty of Biochemistry, Biophysics and Biotechnology but also biophysicists from the JU's Faculty of Physics, Astronomy and Applied Computer Science. The young biophysicists heard a series of lectures and took part in workshops aimed at instilling a proactive approach to studying the field of biophysics. We also presented the various possibilities for scientific growth available to students such as scientific research, student exchange programmes and internships. The workshops were held in groups in which the participants worked together to complete applications to different foundations and to plan their own projects. Evening activities were designed to integrate the younger students with the older ones. This was achieved both around a campfire with a game of Chinese whispers [a game commonly played in Poland in which a phrase whispered from one to person to the next passes around in a circle These activities turned out to be so much fun that they will surely be repeated next year.

To assist the young students of biophysics in making a good decision about which group or lab to join, in late October Nobel organized What's up in the lab?, an event consisting of a tour for 1st and 2nd year biophysics students of our Faculty's most interesting laboratories.

Also in October, Nobel was one of 18 students' associations to take part in the IX Polish **Gathering of Physics Students' Associations** held in the city of Torun. Among the various activities, we toured the historic old quarter, saw a presentation in the W. Dziewulski planetarium and enjoyed a unique opportunity to visit the Astronomical Observatory in Piwnice guided by Prof. Andrzej Strobel. Nobel Biophysics Students' Association also achieved success in the form of a 3rd place award given for Paulina Rybak's poster presentation. The scientific aspects of the conference were certainly appealing to Nobel's members, and this was readily evident in the very lively discussions which took place both during the official lecture sessions as well as behind the scenes.

We also visited Lublin to participate in the I Polish Student's Conference Modern Experimental Methods in Physics and Chemistry. This conference was organized by our friends

from the Maria Curie-Skłodowska University Physics Students' Association along with the Alkahest Students' Association. The 23 lectures included four presented by members of Nobel (including younger students) enthused about presenting their research results and areas of interest. Not to be overlooked is the fact that the award for best lecture was given to our friend from the 5th year, Asia Kwiatek, for her somewhat humorous but thought-provokingly substantial presentation entitled "And there was life or... on how to image a cell".

> Agnieszka Pierzyńska-Mach Aleksander Szczurek

NOBEL







Workshop "My own project"



Evening integration session by the bonfire



IX Polish Gathering of Physics Students' Associations

styczeń 2011

WE WISH YOU A MERRY CHRISTMAS - THE FACULTY'S CHRISTMAS PARTY



Our Faculty's Christmas party took place at 3pm on December 21st. This was the second time that the annual Christmas gathering was held. Preparations were begun long before the event but reached their culmination on Tuesday morning when faculty and students The rich selection of goodies included tempting salads, savoury herring and cakes and pastries capable of making even the strongest-willed forget about diets in the blink of an eye. The participants were charmed by the décor of room C031 which, under the direction of Dr. Magdalena Tworzydło, the event's principle organizer, had been finely decorated with mistletoe and lights.



Those gathered for the party were welcomed with warm words from Prof. Marta Dziedzicka-Wasylewska. They then enjoyed a performance by the Faculty's excellent choir which had prepared a special selection of the most beautiful Christmas carols. The Dean of the Faculty, Prof. Wojciech Froncisz, extended a greeting of best wishes for the Christmas season and the coming New Year to all of the faculty and students. The participants then ex-







changed holiday wishes amongst themselves accompanied by the traditional breaking of Christmas wafer. Everything elapsed in a truly family-like and joyous atmosphere. At last, all sat down and enjoyed the many treats accompanied by a delicious traditional borsch soup served by the "Nobelki" (as the members of the *Nobel* Biophysics Students' Association are affectionately called).

A happy Nobel

The members of *Nobel* not only distinguished themselves with their assistance in organizing the party, but also gave an extraordinary presentation of their stage talent by preparing an interpretation of Charles Dickens' A Christmas Carol. The spectators were brought to hearty laughter again and again as they watched the ghosts haunting a Scrooge who victimized his students, was rude to his colleagues and nasty to the graduate students. Thankfully, the ghosts succeeded in getting Scrooge to amend his ways in time. Further surprises were also in store: every Department received a holiday gift from the Prof. Zygmunt Wasylewski FBBB Foundation. The party concluded with everyone joining in the singing of Christmas carols once again led by the Faculty's choir.

We would like to extend our appreciation to all of those who contributed our Christmas party and helped turn it into such a successful and cordial event.

Dominika Giza





Prof. Wojciech Rypniewski, Centre for Biocrystallogaphic Research, Institute of Bioorganic Chemistry PAN, Poznań, Structure of CNG repeats in RNA duplexes. Implications for TREDs (Trinucleotide Repeat Expansion Disorders) research, October 26th, hosted by the Laboratory of Cell Biophysics

Dr. David Dombrowicz, Pasteur Institute, Lille, France, *Atopic dermatitis: recent advances*, November 5th, hosted by the Department of General Biochemistry

Prof. Heiko Herwald, Lund University, Lund, Sweden, *Haemostatic modulation in severe infectious diseases*, November 8th, hosted by the Department of Microbiology

Dr. Johannes V. Swinnen, Katholieke Universiteit Leuven, Leuven, Belgium, *Membrane remodel*- ling in cancer development: implications for cancer biology, tumour subtyping and therapy, November 8th, hosted by the portal dolinabiotechnologiczna.pl

Dr. Zenon Matuszak, Department of Biophysics JU FBBB, *The role of select redox systems in the biophysics of oxidative stress in pigmented cells.* A systemic approach., November 19th, pre-habilitation lecture

Dr. Joanna Węgrzyn, Department of Pathology and Laboratory Medicine, Canada's Michael Smith Genome Sciences Centre & University of British Columbia, Vancouver, Canada, *The role of microRNAs in the pathology of 5q-syndrome*, December 22nd, hosted by the Department of Medical Biotechnology

GOŚCIE



Prof. Heiko Herwald

PUBLICATIONS COMMITTEE

The publication of materials and the dissemination of information about our Faculty is the main task assigned to the newly established Publications Committee, called to life by the Dean of the Faculty of Biochemistry, Biophysics and Biotechnology in December 2010. The members of the commission are Dr. Martyna Elas, Dr. Magdalena Tworzydło, and Dr. Krzysztof Pyrć. The Commission aims to facilitate collection and access to information about the work and accomplishments of our Faculty.

Besides editing Triplet and the Annual Report, the Committee will also oversee the Faculty's website. We would therefore like to kindly ask you to send us information about your work, including awards, grants, invited guests, important scientific events, achievements, patents, etc. Thanks to your cooperation we will be able to keep the website up-to-date and help promote the Faculty and its members. Our address: redakcja.wbbib@uj.edu.pl

PUBLICATIONS

PUBLIKACJE - III kwartał 2010 c.d.

Grochot-Przeczek A, Dulak J, Jozkowicz A. Heme oxygenase-1 in neovascularisation: A diabetic perspective. Thrombosis and Haemostasis. 2010; 104(3): 424-31.

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PUBLIKACJE – IV kwartał 2010

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