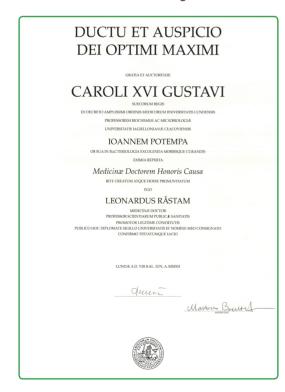


The Quarterly of the Faculty of Biochemistry, Biophysics and Biotechnology, JU

UNIVERSITY OF LUND BESTOWS DOCTOR HONORIS CAUSA ON PROFFESOR **JAN POTEMPA**

For many past centuries every May the cathedral in Lund has been witnessing a ceremony of granting PhD degrees to young scientists. Along with it distinguished scientists from all over the world are awarded the title of Doctor honoris causa. In 2012 the Faculty of Medicine at University of Lund honored two people. One of them was Prof. Jan Potempa, the head of the FBBB's Department of Microbiology, JU.

The traditional ceremony is held in accordance with a precise protocol, which decides not only upon the proper dress code (for gentlemen: black tailcoat, black vest, white shirt and white bow tie), but also the places people sit and the order of bestowing honors.





Prof. Jan Potempa (first from the right) in front of the main building of University of Lund

This year the solemn event took place on May, 25th and started with a grandiose procession consisting of the university authorities, 210 just-nominated PhDs and 19 honoris causa laureates. Together with the university orchestra playing marches, they set out from the main building and proceeded towards the cathedral. Sharp at noon the procession was welcome by the tunes of In dulci jubilo.

The ceremony of receiving honoris causa doctorate was conducted in Latin to the accompaniment of church organs. First a representative of the Faculty of Medicine shortly sketched the portrait of Prof. Potempa and presented his scientific achievements, emphasizing the connections with University of Lund. Next the distinguished nominee was handed a diploma and university insignia – a black top hat and a ring.

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Afterwards the head of the faculty and the Lutheran bishop of the cathedral congratulated Prof. Potempa and the cannonballs fired.

The event lasted for three hours and was closed with a prayer. Then all the participants again formed a procession and headed back towards the main university building wher they posed for photos and exchanged cordialities. In the evening there was a banquet in honor of freshly nominated Doctors *honoris causa*. Among the guests there were university authorities, representatives of Swedish ministry of education and sponsors.

An honorable title awarded to Prof. Potempa is undoubtedly an expression of high international respect for his achievements and long-lasting cooperation with foreign research centers.

DEAN ELECTIONS

Four years have passed since the last elections. Thus in accordance with the Statute of Jagiellonian University there were new office faculty elections held this year. On May, 15th during a special meeting the Faculty Council decided upon new authorities for years 2012–2014. Prof. Wojciech Fornisz was again chosen the Dean of the Faculty, Dr Ryszard Gurbiel became the Vice-Dean, General Affairs. In a new academic year Prof. Zbigniew Madeja will be the Vice-Dean for Research and International Cooperation, while Prof. Marta Dziedzicka-Wasylewska will keep the post of Vice-Dean for Student Affairs for the second tenure.

GRADUATION CEREMONY

On June, 29th several dozen graduates received their MSc diplomas of the FBBB. Among them there were the first ever graduates of a unique field of study – Biochemistry.

The guests at the ceremony were not only the diploma holders but also their near and dear, Dean's office representatives and lecturers. The invitation was accepted by the Vice-Dean of the Faculty of Biology and Earth Sciences Dr Elżbieta Haduch and the Vice-Dean of the FBBB in the years 2002–2008 Dr Amalia Guzdek.

At 3 o'clock in a crowded lecture theater *Gaude Mater Polonia* sounded and then the Dean of the FBBB Prof. Wojciech Froncisz gave a short speech. He talked about the biggest events of the previous year – new grants, awards, honors and fellowships received by the students and researchers of the faculty.



He mentioned guest lecturers, conferences and events promoting science. He also thanked Vice-Deans who would finish their tenure. Eventually, he addressed the "fresh" graduates expressing hope that the years of their studying would be remembered as not only hard work but also joy. Professor congratulated the graduates on their splendid theses and wished for the best in professional and private lives.

The next speaker – Vice-Dean for Student Affairs, Prof. Marta Dziedzicka-Wasylewska hoped that the graduates would remember where they came from and reminded them to keep in touch, gaining strength from friendships they had started during their studies.

As always the graduation ceremony was joyful, filled with funny stories, handshakes and affections. After all the graduates had received elegant navy folders with their diplomas, Bartek Salamaga took the floor. The obviously moved representative of the graduates thanked all the lecturers for the knowledge, the office personnel for solving innumerable difficult problems and – the last but not least – the graduates' parents for their constant support which let them celebrate that splendid moment.

The final part of the ceremony was the solemn *Gaudeamus igitur* performed by the faculty choir, then the official photo session with flying birettas and a farewell toast.

Trislet

THE FACULTY PICNIC – A REPORT

For weeks intriguing posters with a mysterious dwarf invited the students and employees of the FBBB for the annual picnic. This time the Biochemistry of the Cell Department organized this festive event which started on a sunny afternoon on May, 25th. Plenty of food was prepared and an official culinary contest took place. While the jury with Dr Jacek Międzybrodzki as the chairman was assessing the dishes, everybody enjoyed nibbling on colorful snacks. The verdict was as follows: the Biology of the Cell Department won in the category "Salad" and the Microbiology Department was the best at "Grilled dish" and "HOOD-dog". Three awards went to: the Biology of the Cell Department for sweets shaped as amebas, to Sudipta Das for an exotic Indian dish called samosa, and to Magda Szczygieł for egg mice BALBs. Traditionally the faculty choir honored the occasion, which was met with lively applause.

The well-fed and satiated (with home--made wine!) audience was ready for a big moment. The hostess of the picnic Dr Joanna Bereta raised the golden curtain and revealed Eppendwarf to the world. The statue of the dwarf holding the enlightenment candle received a fair round of applause. The level of enthusiasm was equally high after Dr Międzybrodzki read his own poem praising the FBBB.

The next item on the agenda was "Race to Eppendwarf". Six teams joined the competition, including the ladies from the Dean's office. There were five tasks to be completed:

- to measure out 30 ml of orange juice to a test tube with a little pipette so called "ciuciek",
- to go around the sundial three times

 holding a test tube in hand without spilling a drop,
- to pump juice out of the test tube to a beaker using mouths only,
- to become "a human pair of scales"

 with two beakers in hands participants had to measure out enough sugar to balance the weight of juice,
- to fire a pipette so as to hit Eppendwarf.

The competitors fought fiercely. The Biology of Cell Department turned out to be the fastest and best sharpshooters – they will get the privilege to organize the faculty picnic next year. The prizes for winners included a basket full of treats, the statue of Eppendwarf himself and a glass cup (kept for a year only). The Dean of the FBBB also appreciated the efforts of the winning team and awarded them with a bottle from the Jagiellonian winery.

Karolina Ossysek

















phot. Dominika Giza

FBBB AT THE SCIENCE FESTIVAL



For four May days Kraków hosted the 12th Science Festival whose motto this year was "Theory-Recognition-Experience". The FBBB took part in the debate "Biotechnology Everyday" and also presented various experiments on the Main Market Square, which were a big attraction for passer-bys from Kraków and tourists. The stands were prepa-



phot. Dominika Giza



red by the members of students' associations "MYGEN" and "NOBEL" together with the Biology of the Cell Department. Every visitor could e.g. look through a fluorescent microscope, see how skin is grown in vitro or admire amebas. People interested in botany had a chance to observe DNA isolation from an onion, plant extractions and phototropism. Biophysics stand offered a laser measurement of microorganisms and the measurement of voice level.

The biggest interest was raised by the stands called "Secrets of Latte Macchiato" and "Magic of enzymes" which e.g. explained why you can't make a pineapple jelly. Young visitors enjoyed "Origami of DNA" and "Sweet invisible ink" most.

This year's edition of the Festival was very successful and gained experiences will be of use in the future. Special thanks to the tutors Dr Anna Wiśniewska-Becker and Prof. Zbigniew Madeja for their help and support.

GRANTS

On May 30th, 2012 National Science Centre made public the ranking of projects accepted for funding within the second edition of OPUS, PRELUDIUM and SONATA programs. Ten projects were prepared by the FBBB, JU. Below is the list of recipients of the grants:

OPUS

Dr Jolanta Jura - "Analysis of molecular background in bright cell kidney cancer and the role of MCPIP1 gene in carcinogenesis" 763 000 PLN

Prof. Tadeusz Sarna – "The role of free radicals and singlet oxygen in phototoxicity and photodynamic therapy of tumor and bacterial infections in low oxygen concentration" 744 960 PLN

Prof. Hanna Rokita - "Analysis of functions of proteins induced by MCPIP in human neuroblastoma cells" 442 000 PLN

Dr Joanna Kozieł - "Explanation of the role of MCPIP1 in mechanisms regulating innate immunity during infection" 643 500 PLN

PRELUDIUM

Mirosław Książek - "Tannerella Forsytha: regulation of inner- and outer-cell proteolytic activity in pathogenic mechanism" 192 400 PLN

Natalia Wolak – "Role of thiamine in response of Saccharomyces cerevisiae to environmental stress, especially systems of inner- and outer--cell transport and its regulation mechanisms on molecular level" 116 560 PLN

Łukasz Skalniak – "The significance of proteolytic treatment in molecular functions conducted by MCPIP" 234 300 PLN

Chhavi Aggarwal - "The role of phosphoinositides in transmitting signals from phototropins in higher plants" 88 140 PLN

Martyna Krzykawska - "Efficacy biomarkers of photodynamic therapy in lung cancer" 299 191 PLN

SONATA

Dr Agnieszka Katarzyna Banaś – "The impact of visible light and carbohydrates on plants' response to UVB radiation" 950 000PLN

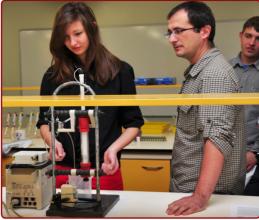
One month later there was an announcement regarding program MAESTRO. Unlike the previously mentioned ones, MAESTRO is geared towards very experienced scientists whose research may open new perspectives. Prof. Jan Potempa will get 2 981 498 PLN for his project "Unique system of protein secrecy of bacteria responsible for periodontal disease".

'l'rislet

OPEN DAY OF JAGIELLONIAN UNIVERSITY AT FBBB

June 1st was the Open Day at Jagiellonian University. The FBBB joined in as well and presented its three fields of study. In the main hall there were stands dedicated to Biochemistry, Biotechnology and Biophysics. Every hour a film promoting the faculty was played to the visitors who could also participate in ten workshops showing basic laboratory techniques. There were also five lectures. The Open Day was organized by students from the associations "MYGEN", "NOBEL" and "N.ZYME" along





with the Departments of Analytical Biochemistry, Physical Biochemistry, Biotechnology of Plants, Plant Physiology and Biochemistry and Microbiology.

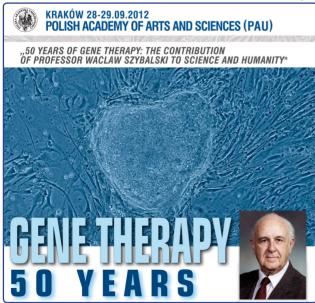
Although the day was uninvitingly rainy, about 150 people attended the event – most of them were high school students who would hopefully join the FBBB in the future.

CONFERENCES AND WORKSHOPS

Molecular modeling classes and the first encounter with gel filtration (phot. Magdalena Demkowicz)

50 years of gene therapy

50 years have passed since the first ingenious experiments conducted by Prof. Wacław Szybalski took place. In 1962 this distinguished Polish scientist, biotechnologist and geneticist was working at University of Wisconsin in Madison, US. and there he made the historical achievement.



The cells devoid of the activity of an enzyme (HPRT) are not able to grow in the HAT medium. Prof. Szybalski with his wife Dr Elizabeth Szybalski added to such cells the DNA isolated from the normal counterparts. Some of the cells treated in this way started to grow in the HAT medium and synthesize nucleotides. Later while writing about his experiments Prof. Szybalski used the term "gene therapy" for the first time. The HAT medium was afterward used for the generation of monoclonal antibodies.

> 50 years after the breakthrough discovery which laid foundations for further development of gene therapy Polish Academy of Arts and Sciences, Polish Society of Biology of the Cell, Polish Biochemical Society and Biotechnology Department of FBBB, JU organize a conference in honor of Prof. Szybalski and his works.

> The symposium will take place in Krakow on 28–29th September 2012. More information is available on http://gt50yrs.org.

> The conference will coincide with the ceremony of awarding Prof. Szybalski with the *honoris causa* doctorate of Jagiellonian University.

In April JU Senate having heard the resolution passed by the Faculty Council of the FBBB and

cont. p. 6 ▸

July 2012



CONFERENCES AND WORKSHOPS cont. from p. 5

the reviews prepared by Prof. Ewa Bartnik from University of Warsaw and Prof. Ewa Łojkowska from University of Gdańsk, decided to bestow the prestigious h.c title on Prof. Szybalski. The ceremony will be held in Collegium Maius on September, 28th. Prof. Józef Dulak, the head of Medical Biotechnology Department (FBBB, JU) will give a laudation speech.

In the afternoon the conference "50 years of gene therapy: the contribution of Professor Wacław Szybalski to science and humanity" will begin and Prof. Szybalski – an honorary guest



Participants of the methodology workshops

will be awarded a membership of Polish Academy of Arts and Sciences (the motion was passed on June 23, 2012).

Methodology workshops within the project "Study of protein dynamics in living cells after DNA damage"

The workshops organized in the last days of June by the Biophysics of the Cell Unit at FBBB, JU were financed by the European Union. Their aim was to establish and develop closer cooperation of three research centers: the Biophysics Institute of the Czech Academy of Sciences in Brno, the Institute of Kinetics of Chemical Reactions and Burning (the Russian Academy of Sciences in Novosibirsk) and the Faculty of Biophysics, Biochemistry and Biotechnology, JU.

The participants, who were students and PhD students from Brno, Novosibirsk and Kraków, had a chance to learn advanced microscope techniques such as high resolution microscopy STED, techniques using time measurements and FSC to work on live cells.

June 2^{nd} – the last day of workshops – was time for presentations and lectures summarizing the project so far.

AWARDS

Katarzyna Wójcik (second from the left) during the prize awarding ceremony in Warsaw

On April 13th, 2012 during the 11th Training Conference of Polish Society of Internal Medicine best original student works were appreciated.



The contest organized by the Polish Archive of Internal Medicine awarded Katarzyna Wójcik, a PhD student of Medical College, JU who did some of her research in the Biology of the Cell Department at the FBBB. Her publication "TGF – β 1-induced connective tissue growth factor expression is enhanced in bronchial fibroblasts derived from asthmatic patients" written together with Paulina Koczurkiewicz, Marta Michalik and Marek Sanak took the second place in the contest. The award was handed in Warsaw Sala Kongresowa by the head of the Polish Society of Internal Medicine Prof. Jacek Musiał and Prof. Anetta Undas – the head of the archive.

PHDs

Anna Grochot-Przęczek – "The use of proangiogenic marrow-derived cells in the therapeutic angiogenesisis – the role of heme oxygenase-1". Promoter: Prof. Alicja Józkowicz. June 5th, 2012

Patrycja Kaczara – "The role of melanosomes in defending ARPE-19 cells from oxidative stress induced by H_2O_2 ". Promoter: Prof. Tadeusz Sarna. June 12th, 2012

Urszula Florczyk – "The role of transcription factor Nrt2 in the regulation of processes of creating new blood vessels". Promoter: Prof. Józef Dulak. June 15th, 2012

Magdalena Kozakowska – "Impact of heme-1 oxygenase on lifespan, proliferation and diversification of myoblasts". Promoter: Prof. Alicja Józkowicz. June 29th, 2012



HABILITATIONS



Dr Justyna Drukała

On June 12th, 2012 the Council of the Faculty of Biology and Earth Sciences accepted the habilitation thesis by Dr Justyna Drukała – the head of the Unit of Cell and Tissue Engineering in the Biology of the Cell Department at the FBBB. The thesis entitled "Study of the progenitor cell population of epidermis in the process of wound healing – clinical implementation" is the crowning achievement of her laborious research on stem cells of human skin and their use in clinical trials to heal wounds.

The considerable progress in tissue engineering field which has been made in the last 30 years led to the creation of a new interdisciplinary biomedical discipline – regenerative medicine. Its main tools are the products of tissue engineering which can allow or facilitate the process of healing damaged organs. The so called "triad" of engineering comprises of: cells, biocompatible scaffolds and signal molecules steering the recuperation process. For many years tissue engineering has been conducting the research how to use skin cells grown in vitro. Such cells could serve as the best substitute – and sometimes the only alternative – to save life of deeply burned patients.

In case when dermis has been partly saved the best solution is the graft of epithelium cells. Implementing autologic skin grafts by means of a tissue adhesive doesn't guarantee immediate wound closure, nonetheless it is a very efficient method. The autologic cells use the potential of granulated wound tissue, proliferate, migrate and eventually close the wound. Additionally, providing the wound with the tissue glue with the cells locked within is vital to the process of their migration and proliferation.

The key to skin recovery is the population of somatic stem and progenitor cells. The ability to obtain and grow such cells is crucial in clinical treatment. The non-toxic dye rhodamine 123 can be used to select these cells to prepare a graft. In case of lack of specific stem cells, a need arises to use another source of cells that will diversify into skin cells. Embry-onic stem cells, which are a very controversial and touchy subject, can be replaced by a population of tiny stem cells with a pluripotential phenotype of embryonic stem cells.

The research shows explicitly that such cells are observed in peripheral blood and are mobilized from bone marrow as a result of shock such as burn. Assumingly, there is a natural reaction of the body to heal damaged tissues with the help of stem cells. Provided it is true, such a mechanism could be used to place stem cells in the damaged area or to stimulate the organism pharmacologically so as to multiply stem cells in peripheral blood.

Such a strategy has already been applied in a clinical trial of patients who suffered a heart attack or a brain stroke. The research focuses on the analysis of hematopoietic stem cells and VSEL cells, but surely there are other populations of stem cells i.e. mesenchymal stem cells or progenitor cells that may appear in peripheral blood after the burn shock reaction. Still it is unknown if they do and what is their role in the process of skin regeneration. The introductory and yet unpublished results of Dr Drukała's research suggest the presence of such cells in human skin. Their pluripotentiality aroses hope that skin might be completely regenerated if we manage to grow them in vitro and control their multidirectional diversification.

Progenitor cells of human epidermis have already been clinically used. For years Dr. Drukała has been conducting trials to heal wounds in this way. Those experiences have been included in her habilitation thesis. Keratinocyte cells applied within the fibrin glue create islands of epidermis on granulated wound. With the passing of time the islands grow, merging into a solid layer. Such a method is an element of general and targeted therapy saving lives of patients with the $2^{nd}/3^{rd}$ degree of burn, which is more than 50% of total body surface area.

MOLECULAR BIOTECHNOLOGY FOR HEALTH PROGRAMME

Within the project "Molecular Biotechnology for Health" sophisticated laboratory furniture was bought for two laboratories in the Physiology and Biochemistry of Plants Department. One more new acquisition is a high-speed refrigareted bench centrifuge Sigma6-16K with a set of rotors.

Within the project "Molecular BiotechnologyA just-opend animal house has started rese-
arch in cooperation with Collegium Medicumwas bought for two laboratories in the Physio-
U and the firms "Selvita" and "Adamed".

The implementation of the MBH project has been officially prolonged till the end of 2012.

Centrifuge Sigma6-16K



July 2012

MYGEN

The last three months were very busy for the MYGEN members – apart from weekly seminars. First there was the 2nd Student Maths--IT-Biological Conference entitled "Numbers--Computers-Life". Splendid guests such as Prof. Janusz Bujnicki, Prof. Ryszard Tadeusiewicz and Prof. Bogdan Lesyng gave lectures on bioinformatics and molecular modeling. Some results of research were presented by students and PhD students as well. Here comes the time to

express heartfelt gratitude to Prof. Marta Pasenkiewicz--Gierula for her kind help and supervision during the conference. Since it was met with such warm welcome, the 3rd edition is already being planned.

The huge success was also running an independent science project. It focused on cleaning thermostable polymerases *Taq* and *Pfu* and comparing their enzyme features with commercially accessible proteins – the results will be unveiled soon!

The Festival of Science on the Main Market Square and the JU Open Day created the opportunities to show our work. It meant moving laboratories on location where we isolated DNA from onions and others. On the Open Day we also encouraged high school students to join the FBBB. Thanks for your involvement, help and fun!

Management board of "MYGEN"



Stand of Biotechnology students from "MYGEN" on the Open Day, JU (phot. Magdalena Demkowicz)

NOBEL

On 18–20th May, 2012 the Students of Biophysics Association "NOBEL" organized the 1st International Conference of Biophysics Students. Since the previous two events were so successful a decision was made to open it to the world. The honorary patronage was taken by the Dean of the FBBB Prof. Wojciech Francisz, Rector of JU Prof. Karol Musioł, the Minister





Participants of the conference

of Science and higher Education Ms Barbara Kudrycka.

During the three days of the conference the participants heard 19 students presenting papers on their scientific interests and research. Also the poster session with record number of 28 items turned out to be a huge success.

Each of the sessions was open by a guest lecturer: Anna Nalepa from Max Planck Institute in Mühlheim, Henri Xhaard from the University of Helsinki and Michał Kurzyński from the UAM in Poznań.

The participants of the conference enjoyed not only scientifically-oriented events but also went on a sightseeing tour around Kraków. They visited the underground of the Main Market Square and the salt mine in Wieliczka. On the second day the beautiful weather graced a nice picnic in Będkowska Valley. Since the conference coincided with Juvenalia everybody had a chance to enjoy festive atmosphere of students' life in Kraków. More information about the project on http://ksb-nobel.heliohost.org/icbs.

Anna Sawicka



Wydział Biochemii, Biofizyki i Biotechnologii



On 3rd July, 2012 "N.ZYME" – Biochemistry Students' Association was officially registered, although it had been already active for 5 months. Its members are the students of Biochemistry (1st and 2nd degree of studies).

They have already promoted our faculty during the Open Day of JU and a promotional event "Become a specialists – good jobs are waiting".

The main tasks of the association are: promoting the FBBB and Biochemistry among the students of high-schools, deepening knowledge and making friends

The initiator of the idea was Anna Baranowska – so naturally she became the first head of the association. The other members of the board are: Tomasz Wróbel (vice-president), Alicja Kiwus (treasurer) and Maria Dulak (secretary). The supervisor the "N.ZYME" is Dr Andrzej Górecki from the Physical Biochemistry Department.

Paulina Każmierska



Students from "N.ZYME" promoting Biochemistry during "Become a specialist" event and Open Day of JU (phot. Magdalena Demkowicz)

June 24-26th, 2012

Prof. Jean-Claude Michalski (INSERM Research Director , Director of UMR CNRS /University Lille and Head of Biochemistry Department at University Lille, France) Prof. Michalski invited by Prof. Karol Musiał, Prof. Kazimierz Strzałka (the Head of Malopolska Centre of Biotechnology) and Prof. Józef Dulak had an appointment on 26th June. Having visited Collegium Novum Prof. Michalski arrived at the FBBB. He was welcomed there by Prof. Froncisz. Later he visited the Jagiellonian Center of Innovation and Jagiellonian Center of Drug Development.

The aim of the visit was to present the research potential of JU and discuss the perspectives of cooperation between CNRS, FBBB and MCB.

June 24–25th, 2012

Prof. Chantal Pichon and **Prof. Claudine Kieda** (CNRS, University of Orleans, France). Both ladies participated in Master thesis defenses of two students of the FBBB which were written in cooperation with the Center of Molecular Biophysics CNRS and the University of Orleans. Invited by FBBB.

June 22nd, 2012

Prof. Jan Kajstura (Departments of Anesthesia and Medicine, Brigham and Women's Hospital, Harvard Medical School, Boston, US) Lecture: "Human cardiac stem cells: from discovery to clinical applications". Invited by the Biology of the Cell Department.

May 30th, 2012

Prof. Maciej Żylicz (Molecular Genetics Department, International Institute of Molecular and Cell Biology, Warsaw) Lecture: "Synthetic Biology". Invited by Kraków Division of Polish Biochemistry Association for "Cup of tea at Gronostajowa".

May 28th, 2012

Dr Andrzej Joachimiak (Structural Biology Center & Midwest Center for Structural Genomics Bioscienses Division, Argonne National Laboratory, US) Lecture: "Molecular mechanisms of microbial warfare". Invited by Kraków Division of Polish Biochemistry Association.

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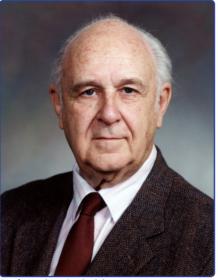
VISITING LECTURERS



N.ZYME

BRIEF BIOGRAPHY

Prof. Wacław Szybalski – a forerunner of modern biotechnology



Prof. Wacław Szybalski

Prof. Wacław Szybalski was born on September 9th, 1921 in Lwów. In 1939 he he graduated from the famous VIII Gimnazjum and joined the Faculty of Chemistry at the Lwów Polytechnic. Impressed by great lectures given by Prof. Adolf Joszt, he became interested in the genetics of microorganisms. After the war broke out Szybalski worked in the Institute for Typhus Research run Prof. Rudolf Weigl as a feeder of lice.

In May 1944 Szybalski went to Końskie, then to Gdańsk where in 1949 he earned his PhD in the Institute of Technology. In the same year he moved to Copenhagen. He worked there with Prof. Winge studying genetics of yeast. Two years later Szybalski went to the US – first he worked in a famous laboratory in Cold

Spring Harbor (1951–1955), then in the Institute of Microbiology at the University of New Brunswick. Since 1960 Prof. Szybalski has been working at the University of Wisconsin in Madison. He's an author of almost 400 publications on microbiology, general genetics, mutagenesis and molecular biology. Apart from experiments with HAT medium (which are worth the Noble Prize themselves!), Prof. Szybalski is has created several research methods. His study of bacteriophage lambda was a breakthrough in molecular biology. Professor was also one of scientists working on a human genome.

"Dr Szybalski is one of the most famous molecular biologists in the world. Almost every field of molecular biology, microbiology and cell biology got an impulse from Dr. Szybalski's great discoveries" – this is how the committee of the Polish Institute of Arts and Sciences recommended Professor for the Casimir Funk Natural Sciences Award. Undoubtedly, Prof. Szybalski is a distinguished scientist, still remembering about his Polish roots. For years he's been supporting Polish science – more than 30 people from Poland have got a chance to work in his laboratory although the competition has always been strong.

Professor Szybalski has been recognized by many Polish universities – he's Doctor *honoris causa* of UMSC University in Lublin, Academy of Medicine in Gdańsk, the Polytechnic of Gdańsk and The University of Gdańsk. He is also a foreign member of the Polish Academy of Sciences and an honorary member of the Polish Society of Microbiology and Italian Society of Experimental Biology. He's an awardee of many prizes, including the Grand Cross with the Star of the Order of Rebirth of Poland from President Bronisław Komorowski.

Prof. Szybalski is a founder and an editor of "Gene" and works for other scientific magazines, too. In 2008 Prof. Szybalski with Dr James D. Watson The Nobel Prize laureate (and Prof. Szybalski's student) visited Jagiellonian University. In September Professor Wacław Szybalski is coming to Kraków again.

Joanna Uchto



▶ GUESTS cont. from p. 9

May 25th, 2012

Prof. Yoshimi Homma (Institute of Biomedical Sciences, Fukushima Medical University School of Medicine, Fukushima, Japan). Invited by the Medical Biotechnology Department.

May 8-31st, 2012

Ludmila Lozinska (Wasil Stefanyk University in Ivanofrankovsk, Ukraine) She conducted intensive research in Microbiology Department (FBBB, JU) working on her PhD thesis: "Aging and carbonyl/oxidative stress in yeast *Saccharomyces cerevisiae* grown on glucose and fructose" (promoter Prof. Halyna Semchysyn). Queen Hedvig Fellowship.

April 25th, 2012

Prof. Maria Sąsiadek (Medical University of Wrocław) Lecture: "Genetic background for large intestine cancer – therapeutic implications".

Dr Paweł Karpiński (Medical University of Wrocław) Lecture: "The importance of epigenetic regulation of gene expression in etiology of large intestine cancer". Invited by Kraków Division of Polish Biochemistry Association for "Cup of tea at Gronostajowa".



Ludmila Lozinska and Dr. Jacek Międzobrodzki

LIST OF PUBLICATIONS: 2012, 2ND QUARTER

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