Urs E. Nydegger

# Pfizer Research Prize 2011

**The 20th Medicine Prize sponsored by the Pfizer Foundation Switzerland (www.pfizerpreis.ch) was imparted in Zurich, early in February 2011. A crowd of about 150 persons, most of them from the science community of our country, applauded 10 prize winners coauthoring six prizes.**

The introductory part of the event defined the basic principles of the Pfizer Prices: they should be attributed to young researchers with sparkling ideas, they honor published work in peer reviewed impactfactor-indexed journals and they are held to support further work of the winners on their future career path.

The Zurich education minister compared basic research in research to the achievements of Christoph Columbus who set out to discover India yet fell on North America. The minister emphasized the importance of basic school training: biology and mathematics, study of languages and history all should be fed by curiosity in early life. Switzerland is an ideal environment for research with institutions which allow basic research. 'Don't dream your life but live your dreams' and 'the dream of yesterday feeds hope for today and reality of tomorrow' – with these words, the medical manager of Pfizer welcomed the prize winners to unload their scientific baggage. They were introduced by members of the scientific committee and used short video shows to present their work.

A prize was given for research published in European Urology 2010 entitled: **A new multimodality technique accurately maps the primary lymphatic landing sites of the bladder.** The extent by which tumor cells infiltrate local lymph nodes in the pelvic area serves for survival prognosis; removal of local lymph nodes in bladder cancer is standard and 30% of patients can thus be cured. However, pre- and intraoperative estimation of lymph node participation is still imprecise the more so as the pattern of lymph drainage network is ill defined – neither magnetic resonance imaging nor computerized tomography are reliable in detecting micro-metastases, surgeons remove as much lymph nodes as possible. The prize winners have injected radioactive isotopes into the bladder in an attempt to follow the lymphatic drainage flow. For this purpose cystoscopy-guided injection of technetium nanocolloid was done into one of six non-tumor-bearing sites of the bladder. At the winners institution a SPECT/CT set- up is installed allowing comparison of functional images of nuclear medicine with the more anatomical modalities like CT. Thus preoperative detection of radioactive lymph nodes with SPECT/CT followed by intraoperative verification with a gamma probe became possible. Backup-extended pelvic lymph node dissection for ex vivo detection of missed lymph nodes completed the design. The SPECT/CT isotope sensor (similar to a Geiger counter) found lymph nodes to be removed and the workers suggest their SPECT/CT plus intraoperative gamma probe technology to reveal patients' individual template of the bladder's primary lymphatic landing sites. Routine removal so far in use removed only in ~50% of all primary lymphatic landing sites in the ventral portion of the external iliac vessels and obturator fossa; the prize-winning study suggests that extended removal of lymph nodes along the major pelvic vessels will remove ~90%. Assays carried out in the clinical laboratory during this study did not extend beyond usual routine tests.

10 prize winners 2011, from left to right: B. Roth, L. Flatz, D. Pinschewer, K. Tan, H. Ewers, W. Römer, B. Grewe, F. Helmchen, J. Haybäck, N. Zeller

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## 20. Pfizer Forschungspreis für Medizin verliehen

Der Pfizer Forschungspreis ist einer der bedeutendsten Medizin-Forschungspreise der Schweiz. Er wurde im Februar 2011 bereits zum 20. Mal an führende WissenschaftlerInnen der Schweiz vergeben. Prämiert werden sechs Forschungsarbeiten der vier ausgeschriebenen Fachbereiche: Herzkreislauf, Urologie und Nephrologie; Infektiologie, Rheumatologie und Immunologie; Erkrankungen des Nervensystems, sowie Onkologie.

Die Ergebnisse sind bedeutend für die Medizin. Sie beschäftigen sich unter anderem mit: «Lymphknotenentfernung bei Blasenkrebs – Verringerung der Morbidität bei Patienten», «Hoffnung auf Impfung gegen HIV/Aids, Malaria und Hepatitis C» und «Neuen Perspektiven bei der Behandlung von Patienten mit Leberkrebs, Hepatitis B- oder C-Virus». Die diesjährige Preissumme betrug 150 000 Schweizer Franken. Bis und mit 2011 wurden 218 Forscherinnen und Forscher mit dem Preis geehrt und mit dem Preisgeld von insgesamt 4,9 Millionen Schweizer Franken die medizinische Forschung in der Schweiz gefördert.

**PreisträgerInnen aus Bern, Genf und Zürich**

Die prämierten Arbeiten entstanden an Forschungsinstitutionen und Spitälern in Bern, Genf und Zürich. Unter den zehn PreisträgerInnen sind eine Frau und neun Männer. Sechs der Preisträger arbeiteten in Zürich, drei von ihnen in Genf und einer in Bern an den Forschungsarbeiten.