



## **Kurt Hellmann Award Lecture**

Sunday 29th June 2014

at 6.00 pm

Inspired research and a close eye for detail led the UK clinician and pharmacologist Kurt Hellmann to the demonstration of the uniqueness and potential clinical value of the cytostatic, cytoprotective and anti-metastatic biological activities of bisdiketopiperazine compounds. The selective antimetastatic property of the compounds was first observed in the Lewis lung carcinoma (3LL) model and this work was regarded as a major breakthrough when published in a landmark paper early in the British Medical Journal in 1972. He clearly showed for the first time that a drug which 'normalised the tumour-induced pathologic vasculature' prevented lethal metastasis. Such an observation pre-dated by many years the current interest in conversion of tumour vasculature to a more normal morphology and function as a therapeutic approach. The fascinating story of these remarkable molecules is told in a recent monograph edited by Hellmann & Rhomberg: "Razoxane and Dexrazoxane - Two Multifunctional Agents" (Springer 2011, ISBN:978-90-481-9167-3).

Kurt Hellmann remained active as a writer, discussant, advisor and benefactor until the very end of his remarkable and productive life. It is notable that his last letter to the Editor of the Journal of Clinical Oncology was published just weeks before his death.



## Kurt Hellmann Award Lecture

Lecture Hall DKFZ Communication Centre Heidelberg

Sunday 29th June 2013: 18.00 – 19.00

### Laudation

***Danny R. Welch, Ph.D.***

*Professor and Chair of Cancer Biology*

*University of Kansas Cancer Center, Kansas City, USA*

### Award Lecturer

***Suzanne A. Eccles, Ph.D.***

*Professor of Experimental Cancer Therapeutics*

*Cancer Research UK Cancer Therapeutics Unit*

*The Institute of Cancer Research, Sutton, Surrey, UK*

## **Targeting metastatic disease: current progress and key challenges**

*Supported by an unrestricted educational grant from  
Novartis*



## NOTES

## **Kurt Hellmann (May 12, 1922 –April 2, 2013)**

Born in Nürnberg on 12 May 1922 Kurt Hellmann attended school there, where in 1928, every child was given a print of *The Hare* by Albrecht Dürer (also a Nürnberg). Kurt kept his print for the rest of his life. When Kurt was 10 yr. old, with increasing Nazi unpleasantness, his father, who had a business in London put his wife, Kurt and his elder brother Hans on a train to Ostend – thence to England, where they arrived on 1<sup>st</sup> April 1933. On arrival the boys spoke no English but soon learned at school in London.

On leaving school Kurt worked as a lathe turner in a tool factory but, although this opened his eyes to the dismal home and working conditions of some of his workmates, which roused his Socialist instincts, it didn't satisfy his intellectual curiosity. In the evenings he studied, well into the night, as an external student at Imperial College London and earned a B.Sc. in Chemistry.

Just before the outbreak of World War Two, his father, who loved England, had applied for British citizenship for the family. When the authorities arrived at their home to arrest them for internment their passports were still at the Foreign Office (as part of the citizenship process) so they were not arrested but the family car and all their bicycles were confiscated!

Kurt accepted a post with a group at the MRC to help in a study of the effect of heat on men in various situations e.g. submarines. Initially due to go to Singapore, conditions dictated otherwise. The group was sent instead to the Anatomy Dept. at Oxford to work with Prof. Le Gros Clark. While there he met and made friends with Dr. Joe Weiner who was instrumental in debunking the authenticity of Piltdown Man.

While in Oxford he did a D.Phil. in Pharmacology at Magdalen College (1953). Having learned about drugs he felt it was pointless not to know how they actually affected people. He therefore decided to do medicine. Because Magdalen had already got its full quota of medical students for the year he became a student at Balliol. As a student, financial assistance was gained by doing a few hours/week teaching mathematics to a ground crew at one of the USAF bases near Oxford – an amazing and amusing experience. He qualified B.M.ChB. in 1958. D.M. in 1964 with a Radcliffe Prize.

Having qualified he did both his medical and surgical pre-registration house jobs at the Radcliffe Infirmary and it was there during 1959 he met Jane who was doing a year as resident pathologist. At the end of July 1961 they were married at Chelsea Registry Office by a Registrar whose quaint pronunciation of the word 'lawful' remained in the family vocabulary!

The following day they set off by car on their honeymoon heading to Moscow for the 5<sup>th</sup> International Congress of Biochemistry!! Travelling on the autobahn they were impressed by how little traffic there was on the roads of East Germany as compared to the West. Having stayed a couple of days in Berlin, they then set out for Warsaw and points east and became slightly unnerved when, about an hour after leaving Berlin, they realised theirs was the only vehicle on the eastbound side of the autobahn whereas on the westbound side there were long convoys of Russian military vehicles, many carrying troops, moving towards Berlin. Only after returning home a few weeks later did they realise they had witnessed part of the preparations for the building of the Berlin Wall.

The Automobile Association (AA) had provided a route map taking in approved camp sites in Minsk, Smolensk, Moscow, Novgorod & Leningrad and which indicated where petrol pumps were to be found between camp sites. On applying for attendance by car to the Moscow meeting Kurt had to notify the Russians of the dates on which they expected to be at any particular camp site. Entering Russia at Brest Litovsk took for ever, (the car was minutely inspected inside and underneath) but eventually they started along straight, virtually empty roads being monitored at intervals by soldiers with binoculars in watchtowers. It was nearly dark when they found the camp site in Minsk but all was well.

They continued their journey on almost empty straight roads and only as they approached the outskirts of Moscow did they become part of a queue of traffic which was then stopped by police. No traffic was being allowed into Moscow until the Parade honouring Titov (the second cosmonaut) had dispersed.

After the meeting they drove north and, having spent one night at the campsite in Novgorod (with the biggest mosquitoes in the world!), they moved on to Leningrad and spent an interesting few days there and in the surrounding areas.

Heading towards Finland they were soon accompanied by a Russian army vehicle which escorted them through a wide stretch of uninhabited land to the border. Part of the customs post on the Finnish side was a lovely little coffee shop – the feeling of relief was huge!!! The drive to Helsinki through endless forest on unsurfaced but well engineered roads was beautiful and peaceful. From Helsinki they sailed to Stockholm in time to look in on the First World Congress of Pharmacology! Then home.

Kurt's research and clinical work has been well documented in several publications. While he was head of the Chemotherapy Dept. at the Imperial Cancer Research Fund (now Cancer Research UK) there was an official visit to the Fund by the Queen and the Duke of Edinburgh. As the

Queen's tour reached the Chemotherapy Lab. Kurt was asked to keep her 'entertained' because of some hitch in the proceedings elsewhere in the building. After 20-30 minutes, to everyone's relief, the tour continued: Kurt had been very impressed by the Queen's interest and understanding of their work and felt the day had been worthwhile. To his great surprise, while attending a meeting in San Francisco some time later he was woken at 3 am by a 'phone call from Jean – his secretary, telling him, very excitedly that he had been invited to lunch at Buckingham Palace! On 26th March 1980 he was one of eight guests from various walks of life and with various skills and achievements who lunched with the Queen. Undoubtedly, the most memorable day of his life!

As he grew older, Kurt's socialist instinct became rather staunchly conservative! He was a great admirer of Churchill.

In his younger days he had played tennis and squash quite well. He was interested in Oriental Art and classical music and he greatly admired the Arts & Craft movement. Kurt became a particular fan of the architect W.A.S. Benson, whose house in East Sussex was home for the last 35 years of his life.

*J. H.*



## Selected Writings

Steiner R, **Hellmann K.** Dexrazoxane prevention of anthracycline cardiomyopathy. *J Clin Oncol.* 2013;31(10):1379;Epub 2013 Feb 25.

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**Hellmann K**, Goold M, Higgins N, Phillips RH. Responses of liver metastases to radiotherapy and razoxane. *BMJ.* 1999;319(7217):1085-6.

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**Hellmann K.** Angiogenesis - time to review progress. *EXS.* 1992; 61:26-8.



**Hellmann K**, Gilbert J, Evans M, Cassell P, Taylor R. Effect of razoxane on metastases from colorectal cancer. *Clin Exp Metastasis*. 1987;5(1):3-8.

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**Hellmann K**. Antimetastatic drugs: laboratory to clinic. *Clin Exp Metastasis*. 1984;2(1):1-4.

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**Hellmann K**. The isolated pilomotor muscles as an in vitro preparation. *J Physiol*. 1963;169:603-20 (Radcliffe Prize 1964).

**Hellmann K**. The cholinesterase of cholinergic sweat glands. *Nature*. 1952;169(4290):113-4.

*A full account of Professor Hellmann's life and career was published as a 90th birthday tribute in Clinical & Experimental Metastasis in 2012, 29(6):523-6.*



The prestigious Kurt Hellmann Award Lecture was inaugurated on the occasion of the MRS-Millenium Meeting London in honour of the 'founding father' of the Society 30 years ago in 1984 for those who have made an outstanding contribution in translating problems of research in metastatic disease from the laboratory to the clinic.

List of awardees:

2000	Stephen Carter, USA
2014	Sue Eccles, UK