



International Cancer News

Compiled by Helen Saul, News Editor



FECS News: New Council

Results of elections for new members of the Council of the Federation of European Cancer Societies (FECS) were confirmed at the recent council meeting in Hamburg. It is likely that these new members will be the last to serve on the Council because the meeting also voted to consider the dissolution of Council as it is now constituted.

One of the main reasons for this is that Council only meets every 2 years. This was adequate in the early years of FECS's history, but since 1991, FECS's volume of business and number of activities have grown to such an extent it has brought the arrangement under increasing strain. A more effective and efficient strategy for

managing the affairs of FECS has become a priority.

The Standing Committee on Byelaws now intends to review the implications of the dissolution of Council in all areas of FECS' activities and will present its findings and recommendations to the Board at its first meeting in 1998. Until this report has been presented, FECS will continue to be governed as before.

The Council of FECS: 1997-1999

President: N O'Higgins

Past-president: JC Horiot

President-elect: DK Hossfeld

Secretary: M Price

Treasurer: H Bartelink

Each full member society of FECS is entitled to nominate three of its members to sit on Council, one of whom also sits on the Board. The new members are:

The European Association for Cancer Research (EACR): J Ponten, JC Lacal, K Schlaefer.

The European Oncology Nursing Society (EONS): C Kreinar, N Jodrell, K Redmond.

The European Society of Medical Oncology (ESMO): C Dittrich, S Kaye, M Tonato.

The European Society for Surgical Oncology (ESSO): G Andry, L Cataliotti, F Rochard.

The European School for Therapeutic and Radiologic Oncology (ESTRO): A Barrett, J Overgaard, P Scalliet.

The European branch of the International Society of Paediatric Oncology (SIOP Europe): M Mott, J Treuner, JM Zucker.

Member with Belgian nationality: E van der Schueren.

Affiliated members:

The European Society for Psychosocial Oncology (ESPO): P McGuire.

The European Group for Blood and Bone Marrow Transplantation (EBMT): G Rosti.

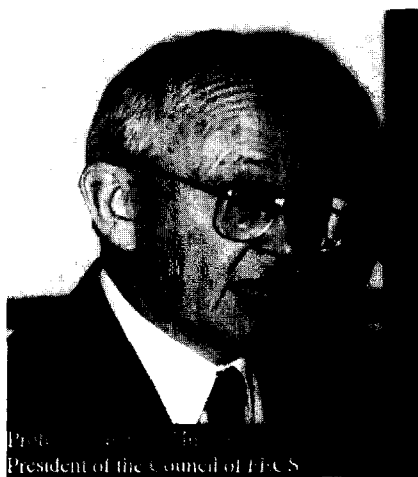
The European Society of Gynaecological Oncology (ESGO): P Boesze.

Non-voting observers:

The European Organization for Research and Treatment of Cancer (EORTC): M Whitehouse.

The European School of Oncology (ESO): C Zielinski.

International Union against Cancer (UICC): I. Denis.



Prof. N O'Higgins
President of the Council of FECS

Continuing Medical Education in Oncology Gets the Go-ahead

Plans for a European accreditation system for continuing medical education (CME) in oncology took another step forward at the meeting. The FECS Council approved a working party report, and an educational lead will now be appointed to take the project forward.

The proposed Accreditation Council for Oncology in Europe (ACOE) will evaluate CME activities and provide guidelines for course organisers. It will

work alongside existing accreditation bodies and where appropriate, courses will receive a double seal of approval. It aims to accredit educational programmes with an interdisciplinary focus in oncology and to encourage participation of each discipline in each other's educational programmes.

Ms Pat Webb, lecturer in palliative care at Trinity Hospital in London and a member of the working party, said that inequalities in provision and outcomes

of care across Europe provided the incentive for the working party to be set up. Continuing medical education is generally seen as a professional obligation but one which is not mandatory. However, Ms Webb said this may change in time since other professions in some European countries are obliged to undergo further education. 'We can only assume it will become mandatory for all professional groups,' she said.

New Affiliated members

The European Society for Psychosocial Oncology (ESPO) renewed its affiliated membership of FECS for a further 2 years and the European Group for Blood and Marrow Transplantation (EBMT) and the European Society of Gynaecological Oncology (ESGO) were granted affiliated membership for the first time. Affiliated membership is offered to organisations with a specific interest in one or more of the main cancer treatment modalities, basic cancer research or cancer nursing.

Position Statements

FECS is to produce a series of brief clear statements on specific cancers or cancer-related topics of general interest. These position statements will cover subjects such as cost effectiveness in cancer care, continuing professional education in oncology, clinical cancer research, palliative care, tobacco and evidence-based practice.

The statements are intended for the widest possible audience: the media, politicians, lay public and members of the research, clinical nursing and paramedical professions. The overall aim is to raise awareness of FECS as the premier repository of the profession's views on clinical and experimental oncology and cancer nursing in Europe.

Links with the ECL to be Expanded

Collaboration between FECS and the Association of European Cancer Leagues (ECL) is set to continue and develop. Areas of mutual interest include training trainers, clinical cancer research and discussion of unproved methods of treatment. Professor van der Schueren, Chairman of the joint working party, said the working party will continue until 1999, at which point its continued existence will be the subject of review.

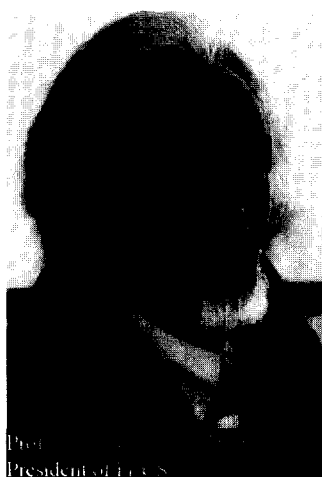
Closer Ties with ASCO

Following the visit of the President of the American Society of Clinical Oncology (ASCO) to the FECS Council meeting, it was agreed that FECS and ASCO would forge closer ties in future. The first manifestation of this was a joint FECS/American Society of Clinical Oncology (ASCO) symposium on pancreatic cancer at ECCO 9.

Special Report: ECCO 9—The European Cancer Conference, Hamburg 14–18 September 1997



ECCO 9—the European Cancer Conference organised by the Federation of European Cancer Societies (FECS), is now established as one of the world's leading cancer events, said Professor Jean-Claude



Prof. Jean-Claude Horiot
President of FECS

Horiot, President of FECS, in his welcome address to delegates. It covers the many fields of oncology, from experimental research to diagnostics and treatment. It involves all disciplines working together in cancer: scientists, the nursing community, social workers and doctors from a variety of medical specialities. He said the committees responsible for developing ECCO 9 had made every effort to ensure that the guiding principle of FECS, 'the absolute necessity to understand the value and importance of the multidisciplinary approach to cancer', remains centre stage. 'I sincerely hope you will find this message easily discernible in the many and varied sessions,' he said.

ECCO 9 was held at the Congress Centrum Hamburg and opened on Sunday 14 September 1997. It attracted more than 8,000 delegates from all disciplines from throughout Europe and beyond.

Two Treatments Are Better Than One for Lung Cancer

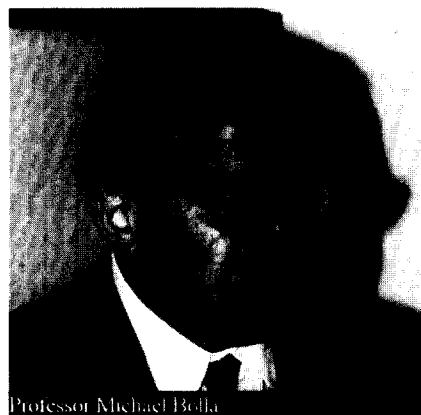
Combined modality treatments are giving 'wonderful' results in the treatment of cancer, according to Professor Harry Bartelink from the Netherlands Cancer Institute, Amsterdam. He was awarded the Klaus Breur Award by the European Society for Therapeutic Radiology and Oncology (ESTRO) and he devoted his award lecture, entitled 'Towards prediction and modulation of treatment response' to developments which are having a positive effect in the clinic. In an early trial, concomitant radiotherapy and cisplatin was much more effective against non small cell lung cancer than radiotherapy alone. However, it was only effective in certain patients and Professor Bartelink's group

developed an assay to distinguish between those patients who were sensitive to cisplatin and those who were not. They found that patients with a high content of cisplatin DNA-adducts in the buccal mucosa had a much better survival rate than those with a low or not measurable content.

Professor Bartelink said that patients would benefit from combined modality treatment and that the results of trials were so impressive that he would not believe them until they have been confirmed. In future, he said assays which measure tumour characteristics and predict responses to treatment will help clinicians adapt treatment regimens for individual patients.

Improved Survival for Men with Prostate Cancer

A combination of hormonal and radiotherapy can dramatically improve survival rates from prostate cancer, a study



Professor Michael Bolla

has found. Professor Michael Bolla from Centre Hospitalier Regional et Universitaire in Grenoble, France, described a study in patients with locally advanced cancers. All received radiotherapy but half were also started on an LHRH analogue at the beginning of treatment and continued for three years.

Patients in the group which received both treatments had a 5 year survival rate of 79%, compared with 62% among those who received radiotherapy alone. 'By putting these treatments together in the right way we have significantly improved overall survival,' said Professor Bolla.

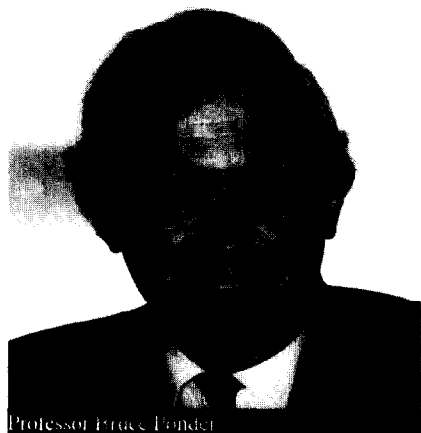
The trial, which was conducted by the European Organization for Research and Treatment of Cancer (EORTC), evaluated

a total of 385 patients. The results were described as preliminary but suggest that the LHRH analogue given from the onset of external irradiation improves local control and survival.

- A further advance in the treatment of prostate cancer will come from the use of three-dimensional conformal radiotherapy which uses a 3D representation of the prostate and seminal vesicles, said Professor Bolla. It enables the radiation to be more accurately targetted and allows doses of radiation to the cancer to be increased, while also reducing the amount of radiation received by the normal tissues of rectum and bladder. Thus acute and, more importantly, late complications from treatment can be reduced.

Genetics' Place is in the Research Lab – Not in the Clinic

Genetic testing for cancer should remain a research topic for the time being rather than a routinely applied technique, according to Professor Bruce Ponder of the University



Professor Bruce Ponder

of Cambridge in the U.K. He said that in the long term, the discovery of cancer genes will help us understand better how cancer develops and how it may be prevented. But in the meantime, genetic testing of individuals should be performed cautiously and in the context of preventive trials.

Professor Ponder said genetic testing, for example for the breast cancer genes, was 'possibly useful' where there is a strong family history of a disease and a decision to be made. But he said it is inappropriate if there is a weak family history and no decision to take. 'There are so many unanswered questions', he said.

If a woman with a strong family history of breast and ovarian cancers has decided to have an oophorectomy, genetic testing can reveal whether her risk of contracting cancer is 80% if she carries the gene, or the

same as in the general population if she does not. 'This is potentially very useful information for this woman,' said Professor Ponder. However, most people who come forward for genetic testing are more like the woman aged 29 whose mother and aunt were diagnosed with breast cancer aged 50 and 47. Scientists will find a faulty gene in only 10% of these cases. The others are not necessarily reassured because there may be other genes involved but not yet known about. 'We run the risk of giving a lot of information, potentially provoking anxiety, and the benefits are not clear. People may be driven to have prophylactic surgery,' said Professor Ponder. He said the costs and benefits of testing have to be carefully weighed.

Late Complications Follow Successful Early Treatment



Dr Tom Voute

Paediatric oncologists may have to go back ten years to find less toxic treatments for childhood cancers, according to Dr Tom Voute from the University of Amsterdam in the Netherlands. He said that there have been tremendous advances in paediatric oncology over the past 30 years, but that this means increasing numbers of patients survive into adulthood and suffer late side-effects to their treatment.

Dr Voute said that, 10 years ago, chemotherapy was added to the treatment of some childhood cancers. It did not increase survival, he said and some of the drugs are cardiotoxic. He suggested that paediatric oncologists may have to go back and re-

evaluate current treatments against those used a decade ago. 'We have to dare to do it,' he said.

He stressed that surgery is the least invasive treatment in paediatric oncology, and that radiotherapy and chemotherapy are much more invasive. Radiotherapy, for example, can stop skeletal growth and prevent a child from ever growing into a normally-sized adult. 'A child is not a young adult, but the treatments are more or less the same,' he said, and added that doctors should consider childrens' future quality of life when deciding on their treatment.



Loco-regional Treatment Improves Survival in Breast Cancer



Optimal loco-regional treatment is a prerequisite to achieve maximum survival in breast cancer patients, said Dr Marie Overgaard, chairman of the Danish Breast Cancer trials (DBCG) radiotherapy group. She was presented with the FECS Clinical Research Award 1997 at the opening ceremony of ECCO 9 in recognition, primarily, of her major contribution to clinical research on breast conserving therapy.

Dr Overgaard devoted her award lecture to 'The implication of adequate loco-regional tumour control in breast cancer—the role of adjuvant radiotherapy.' She said that the DBCG trials had followed more than 3,000 women for an average of 10 years. Patients who received systemic treatment alone had four times the risk of

loco-regional failure compared with patients whose systemic treatment was combined with post-mastectomy irradiation. This was reflected in the overall survival figures: 41% of women on systemic therapy alone survived, compared with 50% of those given combined treatment.

Over the past 25 years, the aggressiveness of loco-regional therapy has tended to be reduced, she said, because of the feeling that loco-regional control may not improve survival from a systemic disease like breast cancer. However, accumulating knowledge suggests that the efficacy of loco-regional treatment has an impact on survival. 'Systemic therapy alone cannot sufficiently prevent loco-regional recurrences,' said Dr Overgaard.

'Inexorable Increase' in Cancer

An 'inexorable increase' in cancer is taking place throughout the world, said Dr Peter Boyle of the European Institute of Oncology, Milan. Estimates suggest that approximately 10 million new cases of cancer arise each year worldwide. This means that in the 30 years from 1970 to the year 2,000 the annual number of new cases of cancer will have doubled, he said.

The ageing population is the most important reason for the increase but the overall figures mask different trends for different cancers. Stomach cancer is decreasing throughout Europe, but there have been large increases in the numbers of cases of non-Hodgkin's lymphoma and malignant melanoma. Lung cancer and other smoking related cancers are increasing throughout central and eastern Europe and an 'epidemic' of lung cancer is predicted among women in southern Europe over the coming decades, said Dr Boyle. The incidence of colorectal cancer peaked in the late 1980s and is now decreasing slightly but this is not easy to explain, he said. Figures from Germany show that testicular cancer peaked in 1981 but then came down quickly as effective modern chemotherapy became widely available.

Dr Boyle said a great deal was now known about the causes of cancer and with existing knowledge it would be possible to eliminate at least half of all cancers. 'Epidemiologists must become more involved in public health,' he said. 'The time has come to stop talking about the potential for prevention and turn the knowledge we have into public action.'

Nurses Need Evidence



Nurses need to become more involved in good quality studies of care in practice if they are to be able to argue for adequate funding in future, said Professor Jessica Corner, from the Royal Marsden Hospital in the U.K. She said current studies of nursing interventions were largely descriptive, included little evaluation of specific techniques and, if they did, were rarely replicated. Study designs were usually insufficiently rigorous for the studies to be combined in meta analyses and evidence generated from such analyses was weak.

Professor Corner said that the lack of evidence on nursing practice was true of other areas of medicine and that the focus of controlled trials has been to evaluate drug therapies. 'We don't have to be too embarrassed,' she told her audience.

However, she called for nurses to argue

for funding to carry out their own studies. In the U.K. for example, a systematic review of the management of compression treatment, a nursing question, was carried out within the National Health Service, but not by nurses. 'We need to look for new and imaginative ways of designing studies,' she said.

At a press conference, Nora Jodrell, from the University of Edinburgh and President-elect of the European Oncology Nursing Society (EONS), said that, in some fields, such as rehabilitation, nursing literature was leading the way. She said that new data is highlighting the value of nurse-led initiatives in the management of prostate cancer. In future, she said, cancer care will increasingly shift from hospital to home and patients will rely more on skilled nurses.

Ms Jodrell said oncology nurses were expanding into clinical trials but still sometimes experience difficulties such as having a heavy workload, an unclear role and conflicts of responsibility. The education of cancer nurses was also cause for concern and that cancer nursing is not recognised as a specialty by national governments. The European Union, however, has set up a number of educational initiatives for cancer nurses. 'We need ensure that patients have access to educated nurses,' she said. 'Without that, sub-optimal care will continue.'

Public Are Reluctant to Join Clinical Trials

Cancer patients are still too reluctant to be included in clinical trials for new treatments and management and may be discouraged by the information about possible adverse effects that doctors are obliged to provide.



Professor Dieter Hossfeld
Director General EORTC

Professor Dieter Hossfeld, from University Hospital Eppendorf in Hamburg said it was a 'tragedy' if patients were put off entering trials because of this compulsory information.

Randomised controlled trials limit mistakes in research findings that are due to bias and chance and Professor Hossfeld said the battle against cancer relies heavily on this meticulous research. However, many patients asked to join trials refused on the grounds that they did not want to be guinea pigs for an untried treatment.

Professor Hossfeld said patients should be told that people in clinical trials do better than those not included. Medicine will not progress unless people participate in trials, he said. 'We have got to change patients' attitudes.'

Professor Francoise Meunier, director general of the European Organization for Research and Treatment of Cancer, said

that doctors should be able to say to patients, 'I do not know what is the best treatment in your case. If you participate in this trial we will make progress together'.

She said that 20 years of research had improved survival rates in many cancers, such as childhood leukaemia, breast cancer and sarcomas. Survival from testicular cancer had increased from virtually zero, to around 90%. The challenge for the future will be to conduct high quality clinical trials at the European level. Trials will need to take a multidisciplinary approach and include economic evaluations and questions on quality of life as well as survival. And she called for an increase in public funding for this work. 'There is still in Europe a lack of core support for independent trials which are not targetted towards the development of new pharmaceuticals.'

New Contract Signed for the *European Journal of Cancer*



Left to right: Professor Hans-Jorg Senn, Editor-in-Chief of EJC and EORTC; Professor Jean-Claude Horiot, Director General of EORTC; Dr Mike Price, EACR; Vlatka Majstorovic representing Dr Alberto Costa (ESO); together with Geert Noorman (Publishing Director) and Anne Lloyd (Associate Publisher) from Elsevier and Professor Hans-Jorg Senn (Editor-in-Chief of EJC and *ex-officio* member) all attended the annual Liason Committee meeting of the four organisations on Wednesday 17 September, where the negotiations were finalised and the contract formally signed.

After 18 months of negotiation, the new contract between Elsevier Science Ltd and the four organisations affiliated to the *European Journal of Cancer*, (Federation of European Cancer Societies, European Organization for Research and Treatment of Cancer, European School of Oncology and the European Association for Cancer Research) was signed during ECCO 9. Professor Jean-Claude Horiot (FECS and EORTC), Dr Mike Price (EACR), Vlatka Majstorovic representing Dr Alberto Costa (ESO), together with Geert Noorman (Publishing Director) and Anne Lloyd (Associate Publisher) from Elsevier and Professor Hans-Jorg Senn (Editor-in-Chief of EJC and *ex-officio* member) all attended the annual Liason Committee meeting of the four organisations on Wednesday 17 September, where the negotiations were finalised and the contract formally signed.

AACR/EACR Second Joint Conference. Oxford 9–13 September 1997



Sir Walter Bodmer

The second joint conference of the American Association for Cancer Research and the European Association for Cancer Research took place at Hertford College, Oxford University on 9–13 September 1997. The conference attracted participants from both sides of the Atlantic, from South Korea, Singapore and Eastern Europe, some attracted by travel grants for young investigators.

Sir Walter Bodmer, from Oxford, co-chaired the conference with Eric Stanbridge from the University of California, Irvine, U.S.A. and he highlighted some of the most interesting sessions to the *European Journal of Cancer*.

Flies, Worms and Cancer

Cellular pathways are conserved across a wide range of species and study of fruit flies and worms may eventually lead to genes involved in the development of human cancers. The movement of drosophila's wings seems an unlikely target for study, but Roel Nusse from the Howard Hughes Medical Institute at Stanford University described the two *Wnt* genes, *wingless* and *DWnt-2*, which encode for signalling proteins in drosophila. Mammals do not

have wings, but almost the same pathway exists in mammalian cells where it must have a different function and may control cell surface attachment. This knowledge may eventually lead to alternative genes involved in cancers.

Study of the nematode, *Caenorhabditis elegans* may elucidate the pathway by which messages are transmitted from cell membrane to nucleus. Ronald Plasterk from the Netherlands Cancer Institute in

Amsterdam said G proteins are involved at the beginning of the signalling pathway and can be mutated to find out which cells they effect. There are G proteins which are responsible for specific responses in sensory cells, for particular tastes for example. In relation to cancer, study of *C. elegans* yielded early clues to genes involved in apoptosis which then fitted into the cancer story.

Tumour Suppressor PTEN

The *PTEN* gene encodes a phosphatase enzyme which is targeted for inactivation during tumour development. Phosphorylation and removal of phosphates are integral to many cancer pathways and it seems likely that *PTEN* will be a focus of research interest.

The *PTEN* tumour suppressor gene was discovered independently by three groups through its involvement in prostate cancer. One of its co-discoverers, Ramon Parsons, from Columbia University, has since shown that germline mutations of *PTEN* are found also in Cowden disease, an inherited

predisposition to haematomas and breast cancer. Mutations in the gene appear to be more common in cells cultured from tumours, but it is not yet clear where it functions in any particular pathway.

Controlling the Cell Cycle

Not only flies and worms but also the yeast cell has distinct similarities with mammalian cell cycles. Paul Nurse, Director general of the Imperial Cancer Research Fund in London, has studied the tight regulation of the fission yeast cell cycle which ensures, for example, that the onset of S-phase and mitosis take place in the correct sequence. His work uncovered

key steps and genes in the yeast cell control cycle and led to the discovery of a mammalian cell pathway which is mutated in cancers and involves genes such as *p16*.

Gordon Peters, also from the Imperial Cancer Research Fund has applied this to a classical cell biology conundrum: why do human fibroblasts grown in culture die out after a number of generations?

Mutations and deletions in *p16* are more frequent in tumour cell lines than in the corresponding primary tumours and levels of *p16* expression increase dramatically when primary cells are grown in tissue culture. This suggests that *p16* may be part of the mechanism that imposes a finite lifespan on cells in culture.

Mouse Models

The Min mouse will serve as a model for studying the prevention and treatment of colorectal cancer, according to Sir Walter Bodmer. The mouse has a nonsense mutation in the APC gene and these mutations are probably the first events in most human colorectal cancers. Min heterozygote mice have already revealed the importance of gut microbiological flora in linking increased dietary fat with an increase in the number of tumours. Also, when the Min mouse was crossed with a temperature sensitive T-antigen mouse, TSA58, the number of tumours in the small bowel increased. Sir Walter and colleagues have corrected the number of tumours with

the human version of the APC gene, but questions remain. For example, a single version of the human APC gene will not correct a double mutation, which is lethal.

Dr Allan Bradley, from the Baylor College of Medicine, Houston, was the first to knock out the *p53* gene. Point mutations in *p53* are found in many carcinomas, but knocking out the gene gives rise specifically to osteosarcomas and soft tissue tumours. This suggests the mutations may have both a dominant negative effect and other positively acting effects.

Exactly how genetic mutations lead to cancer often remains a puzzle. The breast cancer susceptibility genes *BRCA1* and

BRCA2 are described as tumour suppressors but it has not yet been shown that they are significantly mutated in either breast or ovarian tumours. These genes interact with another gene, RAD51, which works on a DNA repair pathway and so they are also thought to be involved. But it is still not known why *BRCA1* and *BRCA2*, which function in all tissues, give rise to a higher frequency of breast cancer than any other sort of cancer. The same is true of APC which only increases the frequency of a handful of cancers, particularly large bowel cancer.