

The hopes and frustrations of a career in cancer

The next generation speaks out

→ Anna Wagstaff

Young oncologists want the chance to develop their skills, reach their full potential and give of their best. But a *Cancer World* survey shows many are frustrated by too heavy clinical workloads, too few chances to lead research and get published, and too little recognition for their clinical skills. Are potential leaders of oncology in Europe having their careers derailed?

For young medics setting out on their careers, oncology offers almost unparalleled richness. You can be part of the march of science, working with lab and clinical researchers on an international stage. You can build up expertise in particular cancers, working in a team to apply it to each new patient. You can make a world of difference to the lives of patients and their families.

Science, medicine and humanity: oncology offers all three. In an ideal world, medical students choosing oncology will taste all these aspects, find out where their talents lie, and develop their careers accordingly. Such a world would also be ideal for patients and for medical progress. But how far does it match reality?

A survey conducted by *Cancer World* has revealed a variety of barriers to developing a career as a cancer specialist. Top

among them is the weight of the clinical workload – rated the first or second most important barrier in every region of Europe. In western and southern Europe, this is coupled with a strong sense that the quantity and quality of clinical work counts for little when deciding who should be promoted. In central and eastern European (CEE) countries, pay and lack of job openings and training posts are seen as major barriers.

To throw some light on these and other issues, *Cancer World* talked to a number of oncologists in their 30s or early 40s, who have completed their basic training and are building their careers.

QUALITY OF TEACHING

One interesting finding is the variety of experiences. In a profession that relies heavily on ‘learning by doing’, the quality of the teaching and mentoring is crit-

ical. But even hospitals with a good general reputation for training can turn out to be poor when it comes to oncology.

There were comments about very good practice: “I said to [my supervisor] that I wanted to do something in the lab, and he found me funds to do it. I said I was keen to gain some more experience in breast, and he found me somewhere to train in breast. I said I had just heard about the Flims course [on methods in clinical research] and asked, ‘Would you help me to go there?’, and yes he did.”

And comments about very bad practice: “They use their students as menial workers, getting them to write down patients’ clinical records, prepare their charts and fetch the films from radiology. But they never give them the chance to discuss that film for 15 minutes with a senior specialist in radiology.”

Frustration at being denied oppor-

tunities to assume greater responsibility seems widespread. One interviewee described how even good people can get trapped. “One of my colleagues, a brilliant radiotherapist, suffered for almost 10 years under a boss who wouldn’t let him move and didn’t give him freedom to develop.”

The problem seems to get worse as you reach the end of your residency and try to break into the higher ranks. “Those who are still in training have many more opportunities than a few years ago. The problem is when you are in the middle,” said one senior oncologist. “People who have been in a backstage position for a long time and who have learned how to do it should be given the opportunity to lead projects.”

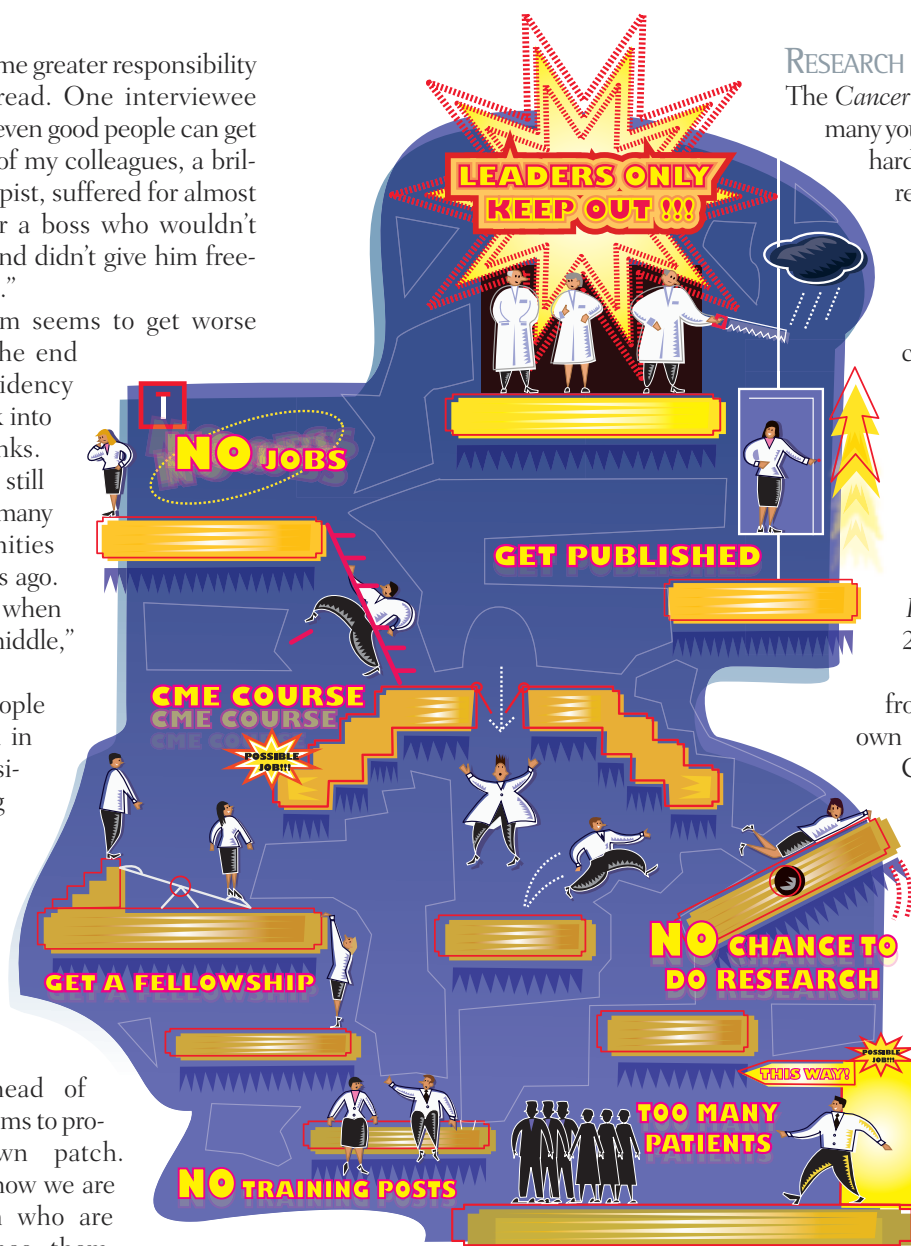
Often a head of department seems to protect their own patch. “Maybe they know we are the generation who are going to replace them. There are very few people who say: ‘I am going to prepare things for when I leave.’ I guess it’s only human.”

Another commented, “There are places where you feel a ceiling, not even a glass ceiling, just one centimetre above your head and you can’t move. Actually they are trying to push the ceiling down.”

Big differences in the quality and evaluation of training programmes is also an issue. In Germany, where responsi-

bility for training lies with each of the 52 *länder*, there is no national accreditation of training programmes for any specialty. Some of the German respondents to the *Cancer World* survey are calling for a national curriculum – consistently taught and rigorously evaluated.

Moves towards devolving healthcare to the regions in Spain are prompting similar calls.



RESEARCH BARRIERS

The *Cancer World* survey revealed that many young oncologists are finding it hard to build up experience in research – with few opportunities to do lab work, design protocols or lead trials, and many obstacles to getting published. This is a particular problem in countries or institutions with a low commitment to medical research (for a comparison of per capita spending on cancer research across Europe, see figure 6 of the *Second Cancer Research Funding Survey*, ECRM 2007, www.ecrmforum.org).

A survey respondent from Austria called for ‘our own national cancer institute’. Comments from Spain and Turkey called for ‘collaborative research groups’; from Ukraine, ‘good labs with high-tech facilities’; and from Bulgaria, the Czech Republic, Italy, Turkey and Romania, ‘more research grants’, ‘more sponsors to run trials’, and ‘greater emphasis on research and giving it time’.

But good translational research requires more than just the right facilities. A strong working relationship between lab scientists and clinicians is essential, yet this seems more of an ideal than a reality. “The people in the lab are not really interested in care and the people in the clinic don’t have interaction with people in the lab. It is so difficult that in the end people do just straightforward clinical research – not the translational stuff.”

Clinical research is itself highly

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demanding. It takes money, time and an immense amount of administrative and clerical work. Unless a centre has well-oiled procedures, clinical trial nurses, admin staff, software and other back-up, the burden on the trial leaders can be enormous. Sofia Braga, a young Portuguese oncologist, worked for a year at the Jules Bordet in Brussels and is now back in Lisbon, at one of Portugal's three large oncology institutes, fighting for the chance to lead a trial of sunitinib as a neoadjuvant in breast cancer. She contrasts the two settings: "They get protected time. And they don't have to fill in CRFs [case report forms]. I spend my day filling

in these forms. It's desperate – it's a humungous amount of work."

Even when an oncologist overcomes these barriers, it is difficult to get published in a prestigious journal. Braga comments, "My institution has not broken into that kind of group, where your name is known. We're still in a place where some of us have had international experience and we'd love to publish more, but it's very hard. We don't have a Baselga, a Piccart or an Armand."

She feels that many European journals are biased against places like Portugal, even though her centre treats more breast cancers than, for instance, the Jules

Bordet. "I published an original article, but it was only the American journals who were interested. Europe is extremely prejudiced. They feel southern Europe is the end of the world. I always tell my fellows to send papers to American meetings and journals, because they respect us."

THE CHANCE TO TRAVEL

Travel is one answer – it is notable how many specialists who make the cover of *Cancer World* mention an opportunity to spend time in a different country as key to their subsequent careers. Many professional and educational organisations offer fellowships where people can get experience in research in different environments (see box).

However, demand is always greater than supply, and while some supervisors encourage their trainees to seek experience abroad, others resent losing an extra pair of hands. Language is a barrier to travel from countries which don't have a tradition of English as a second language. It is also harder to move when you have a young family, or a partner tied to a job. Women are at a particular disadvantage here (indeed, Braga cut short her term at the Bordet and returned to Portugal because of childcare problems).

ESMO (the European Society for Medical Oncology) now offers research fellowships that can be carried out at the fellow's own institution of origin, because of the difficulty some people find in travelling. Martine Piccart, head of the medical oncology department at the Jules Bordet institute in Brussels, who sits on ESMO's fellowships and awards committee says, "That's good I think, but this model should not be favoured too much. I really believe that the most productive

WANT CAREER – MUST TRAVEL

ESSO, the society for surgical oncology in Europe (www.esso-surgeonline.org), offers fellowships to give young surgeons the chance to expand their experience and learn new techniques. They also support surgeons who want to attend the Flims course on methods in clinical research.

ESTRO, the society for radiation oncologists (www.estro.be), offers grants and fellowships for courses, and advertises other fellowship and grant opportunities for radiotherapists on its website.

ESMO, the society for medical oncology (www.esmo.org), recently beefed up its fellowship opportunities. Young oncologists can apply for a 'taster visit' to a translational research unit to see how this research is organised. A one-year clinically oriented fellowship offers young oncologists an opportunity to visit an institution, participate in multidisciplinary rounds, and see inpatients and outpatients. A two-year translational

research fellowship offers oncologists with some experience in research the chance to work in a lab.

ESMO recently introduced a 'teach the teacher' fellowship, which supports a group of young oncologists from one centre to travel to a host institution for six weeks to learn different ways of organising clinical work and research – the aim is to maintain those links once the group has returned, and support them in sharing what they learned.

ESO, the European School of Oncology (www.eso.net) offers, in addition to its own courses, senior scholarships for young oncologists to visit specialist centres for three months to a year for practical training in a variety of specialties.

Other bodies offering fellowships include the UICC (www.uicc.org), the European Organisation for Research and Treatment of Cancer (www.eortc.be) and many major cancer centres and charities in Europe and the US.

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experience for these young people is to go elsewhere for a certain period.”

Romanian-born Razvan Popescu, who is now based in Switzerland and also sits on the ESMO awards committee, has led efforts to promote opportunities for young oncologists from CEE countries to visit other institutions to gain experience in research and different models of clinical practice. But he says it is also important to focus on what happens when (and if) they return.

Popescu would like to see greater support for the work of organisations like CECOG, the Central and East European Oncology Group, which are beginning to expand the opportunities for young oncologists to design and conduct clinical trials. He stresses the value such ‘home-grown’ trials could have for patient care, given that research into the best allocation of resources and optimising treatments that are both good and affordable may be more relevant than some of the research led by the west.

Lack of support for medical research is not just a feature of the less wealthy countries of central and eastern Europe. Miguel Piris, leader of the Lymphoma Group at the prestigious CNIO in Madrid, complains that Spain missed a great opportunity during recent heavy investment in state-of-the-art hospitals. Though there was a significant – and

welcome – increase in clinical posts, there was no accompanying agenda to promote research, despite the excellent potential offered by these new centres.

Martine Piccart mentions the UK as a positive example, where a national initiative to promote involvement in clinical trials in 2001 helped boost cancer patient inclusion to 12% and opened up new opportunities for young oncologists. The National Cancer Research Network (www.ncrn.org.uk) is a collaborative effort between clinicians, the Department of Health and funding bodies – both state and charitable – sustained by a significant number of ‘clinician researcher’ posts distributed across the UK’s cancer hospitals.

In France, the National Cancer Plan offers a further positive example. The Plan provided significant funding for research, introduced a regional network of seven ‘cancero-poles’ (networks) to coordinate and promote research, and provided a back-up team to assist hospitals in building their clinical research capacity. These measures undoubtedly opened new opportunities for young oncologists, though there are growing calls for the decentralisation of research funding – currently concentrated in the hands of the French National Cancer Institute INCa.

Both the UK and France have specific training pathways for ‘academic clinicians’, which integrate research into the residency programme. This decreases the element of luck about who gets opportunities to develop their research capacity. Indeed,

many respondents to the *Cancer World* survey asked for just such training pathways in their own countries. However, there seems to be a feeling among young French and British oncologists that this system forces them to choose between being a clinician or an academic very early, making it harder to change direction as their careers develop.

Lack of opportunity for continuing medical education is also heavily flagged up in the *Cancer World* survey. Though all areas of oncology are heading rapidly towards subspecialisation, there are few opportunities to attend high-quality courses. It is this gap, above all, that the European School of Oncology has sought to fill. It offers a one-week full-immersion masterclass for oncologists in their early 30s to give them a good overview of the field and help them decide which subspecialism to follow. Courses are free, and students continue to receive mentoring from faculty members for several years; however, only 50–60 places are available each year. There is also a pressing need for continuing medical education courses in oncology subspecialties. Currently, ESO is almost the sole non-industry provider, offering short courses in a variety of languages, also free of charge.

ACADEMIC-CLINICAL TENSION

The uneasy relationship between academic and clinical structures seems a major barrier. In France the best treatment and research in solid tumours is done in 20 cancer centres outside the university hospital system. But a young doctor aiming for the prize position of ‘professor’ has to build a career in one of the university hospitals. “You need to



“When they evaluate you for promotion, what counts is research and publication – not patient care”

clone yourself,” said one young oncologist, “It can be very hard to know how to organise your career.”

The situation in Italy is not dissimilar. Riccardo Vigneri, who has sat on Italy’s national CME accreditation committee for the past 10 years, says that many university hospitals are so poor at treating cancer that they don’t have enough patients to be able to teach, and have to farm students out to other hospitals for their clinical training. There they tend to be taught by the head or assistant head of oncology, who is not trained to teach and gets nothing back for teaching. “They often use the trainee oncologists as menial workers. If they do research, it is second class, doing protocols directed by the industry. Their critical faculties are not being engaged to really understand what is going on.”

Italy has some excellent cancer centres which offer superb training opportunities for the minority of students who are lucky enough to be recruited. But a doctor who wants to build an academic career must

stay at the university, often going from one short-term contract to the next, hoping to be chosen as successor to the incumbent professor.

The system is unfair and deeply unpopular, as many of the Italian respondents to the *Cancer World* survey indicated. Vigneri says, “If it doesn’t change, good people won’t be recognised as leaders, they won’t get into positions of power where they can influence what is going on around them.”

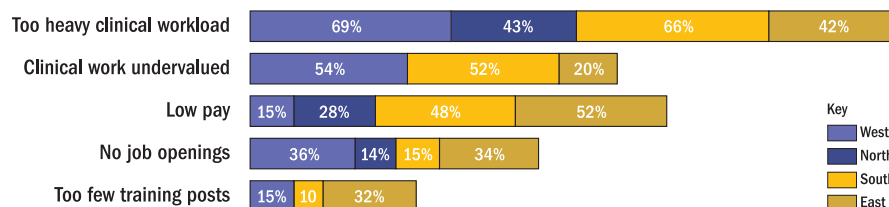
The tension between the clinical and academic sides, common to all medical fields, is exacerbated by the way oncology is often fragmented across departments. This is a particular problem for cancer surgeons, who not only have to split their training across a number of units – neurology, gastro-intestinal, pneumonology – but also have to compete with non-cancer surgeons for senior departmental posts.

Financial pressures are now prompting many governments to demand greater value for money, and they are introducing

performance-based incentives and penalties. Funding for both hospitals and universities is increasingly based on evaluation and competition.

The plus side is that it forces poor institutions to raise their game, and reduces the abuse of personal power and lack of accountability in ‘Mandarin’ type systems, by introducing transparent and objective measures of quality and merit. Some people, however, think the competition has gone a bit too far. Michael Baumann, professor of radiation oncology and head of the Cancer Centre at the Carl Gustav Carus University Hospital in Dresden, comments, “Sometimes you would simply love some time off from writing grant applications and doing research – at the moment it is too competitive and too little money.” He would like to see basic personnel and lab resources guaranteed, with additional grant money available on a competitive basis, more along the lines operating in the UK. “A good mixture of the two would be perfect. At the moment, at least in the poorer places, you have to really fight for grants or you have nothing.”

TOP BARRIERS TO CAREERS IN ONCOLOGY ACROSS EUROPE



Respondents were asked to rate the top three barriers to progressing their careers out of a possible 10 options. The chart shows the top five barriers, with the proportion of respon-

dents from each region who identified each barrier among their top three.

Source: *Cancer World* survey. For further details see www.cancerworld.org/magazine

DEVALUING CLINICAL WORK

This heavy emphasis on competition is a growing trend across Europe, and seems to be adding a new dysfunctional twist to the relation between academic and medical worlds. Being an excellent doctor, who keeps abreast of developments, spends time with patients, works well in a multi-disciplinary team and enters patients into clinical trials may no longer be enough.

This is one of the key messages of the *Cancer World* survey, in which the second most mentioned barrier to an oncology career was the lack of value attributed to

clinical work when deciding on promotion. Since the number one issue is that the clinical workload leaves no time for research, these two barriers create a vicious spiral.

Fatima Cardoso is a senior oncologist at the Jules Bordet institute in Brussels. She has always enjoyed being involved in research, and used to coordinate the translational research unit at the Bordet. But she ended up pulling out of the latter role because she feels very committed to caring for her patients and was finding it impossible to do both.

She warns, however, that choosing to concentrate on patient care is a bad career move for any doctor, and for oncologists in particular. “When they evaluate you for promotion, what counts is your CV – research and publication – nothing to do with patient care. I can understand that if you are applying for a research post, but if you are applying for a position in a hospital, I don’t understand why people don’t rate your value as a clinician.”

Fine ideas about ‘translational researchers’ in academic posts which allow both clinical care and research work are simply not reflected in reality, says Cardoso. “We are completely overstretched by our full-time work in the clinic. We are going back to having to do the research in our free time.”

Cardoso says her generation, now in their early 40s, is suffering because the next generation are not choosing careers in oncology. “They look at my generation, and the way we work, and they tell us: ‘I don’t want to live the life you lead’. They value their quality of life, so they don’t choose this specialty.”

At the same time, experienced and committed oncologists are leaving – often to the private sector where the workload is



much lighter, the pay is better, and clinical work is not undervalued. “We have lost three senior oncologists in the last two years,” says Cardoso, “The workload increases and the workforce decreases.”

Andrew Wardley, consultant medical oncologist at the Christie Hospital NHS Trust in Manchester, UK, agrees there is a problem with clinicians being treated as second class within university hospitals. “University hierarchies are only interested in science. In the past few years there has been a big culling of academic clinicians from senior lecturer posts in top UK universities. A lot of people feel the effort to keep up their RAE [research rating based on publications and grants] is not worth it, and they’d rather stay with the NHS.”

NATIONAL POLICIES

At the Jules Bordet institute, Martine Piccart is very aware of the tensions between the clinical and research roles in an academic hospital. “It is the responsibility of the director to recognise the value of very good clinical work,” she says, “You cannot function with a team of doctors that do only research, nor with a team that do no research at all. To find this balance is not easy, and to avoid frustrations and jealousies is quite a challenge.”

She tries to meet each oncologist individually to agree on their mission. “They may be 100% clinical, 70/30 clinical/res-

earch, or 20/80 clinical/research. Once their profile is agreed, we evaluate them yearly in accordance with that profile, because you won’t expect someone fully involved in the clinic to publish three papers a year, but you will expect that from someone doing research 80%.”

There is a limit, however, to what heads of departments can do in the absence of a joined up approach to healthcare and medical research. Piccart deplores the short-sighted lack of interest shown by many European governments in supporting medical research, and singles out the UK’s National Cancer Research Network, for praise. “This is something I consider very impressive.”

There is also a limit, she says, as to how much departmental heads can do within a climate that increasingly devalues doctors, and health structures that hugely underestimate the skill and effort required in oncology.

“Governments need to re-evaluate how they support oncology clinics. When I see the time we need as oncologists to explain to patients their diagnosis, what is going to be done, the different treatment options, the side-effects of the treatment... You can easily spend one hour. And when you look at what the hospital gets for that, it is peanuts.” The same applies to surgical oncology: “These people often do operations that last hours, and there is a ridiculously small amount of money in place for that kind of surgery.”

Even the battle to get recognition for medical oncology as a specialty has not yet been won in many countries. “That’s the first step and we are not there yet. How can you be attracted to a profession that is not even recognised, and where the things you do are permanently underpaid?”

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