CHAPTER 2

How to start a research career in psychiatry

Domenico Giacco,1 Mario Luciano,1 Sameer Jauhar2 and Andrea Fiorillo1

1Department of Psychiatry, University of Naples SUN, Naples, Italy
2Sackler Institute of Psychobiological Research, Institute of Neurological Sciences, Southern General Hospital, Glasgow, UK

Introduction

Research has always been a source of great interest for young doctors starting a complex and fascinating specialty such as psychiatry, and this is particularly true in recent years.1–3 J.A. Lieberman says that ‘there has never been a better time to go into biomedical research. The science is burgeoning and better than ever. The current funding levels are generous. There are numerous training opportunities. And, finally, the field is eagerly seeking the next generation of psychiatric researchers.’1 Despite several difficulties and obstacles, research in psychiatry is advancing rapidly, and has a diversity that few other medical specialties can rival.2,3 Acquiring research skills is considered by most university professors as an essential part of training.4 In fact, all psychiatrists, even those not primarily involved in research activities, clearly benefit from an understanding of research methodology and from the ability to think critically about research findings.5–7 The section of psychiatry of the Union Européenne des Médecins Spécialistes (UEMS) has recently produced a document called ‘UEMS Framework for competencies in psychiatry’, which states that psychiatrists have to ‘contribute to research and to the development of new knowledge’, and that they should acquire the following specific research competencies:8

• recognize the principles, methodology and ethics of research and scholarly inquiry;
• formulate a research question and conduct a systematic search for evidence;
• select and apply appropriate methods to address the question;
• analyse, interpret and report the results;
• appropriately disseminate and utilize the findings of a study.

Furthermore, the European Federation of Psychiatric Trainees (EFPT) has also produced a statement on research training, according to which ‘Psychiatric residents should be trained in basic knowledge of research theories and methodologies. They should have basic training in analyzing the quality of research. Trainees should also be encouraged to develop scientific attitudes towards their professional activities and an ability to effectively implement new research evidence into their clinical practice.’

Despite the increasing emphasis on the importance of research skills for all psychiatrists, early career psychiatrists often meet several difficulties when they try to acquire the skills needed to participate in research activities and to start a research career; these fall into three large categories:

• regulatory factors, such as time in training programmes dedicated to research experiences and to development of research skills;
• institutional factors, such as lack of mentors and limited technological access, knowledge and resources; and
• personal factors, such as female gender, non-Caucasian ethnic group, lack of motivation and financial difficulties.

This chapter is intended as a practical guide for early career psychiatrists wishing to work in psychiatric research. The different steps to follow to get started in research activities, the international opportunities available for improving research skills, the different phases of a research project, and the different settings and stages of a research career will be outlined. At the end of the chapter, some practical tips will be provided.

How to get started: choosing a career in research

Assessing one’s own research interests

Before starting a career in research, it is essential to identify the fields of interest. Research in psychiatry is, by its very nature, interdisciplinary and involves several different approaches, which focus on the different aspects of mental disorders. The choice should be guided by personal interests and values but, most importantly, by the personal experience of research activities during training. It is important to avoid spending energy on too many projects that are not of interest. Nevertheless, maintaining a very narrow focus may also be a mistake. The mind of a prospective psychiatry researcher must be open to different influences and be aware of the ‘big picture’ of mental disorders.
Reading scientific literature
The knowledge acquired from textbooks studied during training is already at least 1 year old, at best, due to the time required for the author to finish the manuscript, and for the publisher to print and circulate the book. Therefore, in order to keep up to date on the continuous advances in the field, articles published in scientific peer-reviewed journals are of utmost importance throughout the whole medical career. This is particularly true for researchers: the development of valid research hypotheses requires an in-depth knowledge of the updated literature evidence.

Currently, several online databases exist; to access articles of interest, keywords – and sometimes combination of keywords – must be used. Hundreds of abstracts must be screened, among which only a few need to be identified and read in detail. When one or few articles have been identified, it is advisable to go through the methodology of the study first. If this section seems adequate, suggesting that the results can be trusted, then it is worthwhile reading the results, discussion and introduction sections. This process requires experience, which can only be acquired by practice and by the guidance of senior experts. In particular, discussing with professors or senior colleagues how a study has been designed, why a given methodology has been used and, possibly, identifying methodological flaws is a very useful exercise for those wanting to learn research methods and to improve research skills. The so-called ‘journal clubs’ (i.e. groups of individuals who meet regularly to critically evaluate recent articles in scientific literature) help students to become more familiar with the advanced literature in their field. In addition, these journal clubs help to improve students’ skills of understanding and debating current topics of active interest in their field. Research laboratories may also organize journal clubs for all researchers in the lab to help them keep up with the literature produced by others who work in the same field. A continuing medical education course aimed to provide early career psychiatrists with competencies on how to critically read and review scientific literature, and to write scientific papers, is offered by the European Psychiatric Association; see www.europsy.net for further information.

Joining a research group
After the self-assessment of research preferences, the next and crucial step is to join a research group. Learning how to undertake high-quality research requires membership of a group that publishes regularly, and offers a rich learning environment. To be part of a research group, team orientation, team spirit, team management skills and the ability to handle one’s own tasks are required. It is important to become active in the group and to help experienced researchers as much as possible; in turn these will give guidance, mentorship and feedback to younger researchers.
Choosing a mentor
As in other walks of life, it is very important to choose a mentor who can be a guide and a teacher for young and inexperienced researchers. The role of a research mentor is to be a constant key-point for the young researcher. In particular, mentors should: (i) provide ‘research directions’; (ii) involve young colleagues in writing scientific papers; (iii) introduce young colleagues to public speaking at conferences; and (iv) help them interact with members of the research community. It has been documented that having a good research mentor is one of the strongest predictive factors for embracing a successful research career.16,17

Participating in international scientific initiatives (congresses, fellowships, courses)
Participation in international scientific initiatives is essential for early career researchers. Attending a congress provides the opportunity to listen to inspiring lectures by prominent experts and, possibly, to meet them in person. This may be an occasion to establish contacts with them, to ask for their advice on research and receive their feedback, or to propose that they act as mentors or advisors of one’s own research projects. Furthermore, there are several international fellowship programmes and courses for young psychiatrists who want to improve their research skills. These programmes give the opportunity to establish contacts with different research institutions, to work in research centres with advanced technical facilities for research,1 and to acquire expertise in specific research fields. Box 2.1 presents some recent international initiatives aimed at improving early career psychiatrists’ skills in research.

Box 2.1 International opportunities for research training
World Psychiatric Association (WPA) (www.wpanet.org)
The WPA recently established a fellowship programme in order to encourage research activities and networking between early career psychiatrists, particularly those from low- and middle-income countries. Past fellowship programmes have been held, among others, at the Institute of Psychiatry in London and at the University of Maryland School of Medicine, Baltimore, USA.

American Psychiatric Association (APA) (www.psych.org)
The APA research colloquium, offered annually, is aimed to provide guidance, mentorship and encouragement to young investigators in (Continued)
the early phases of their training, and feedback about their past, present and future research from mentors in a small group setting, as well as general information about career development. Furthermore, the APA website has a detailed list of more than 100 fellowships for early career psychiatrists, funded in collaboration with several US universities and international societies.

**European Psychiatric Association (EPA) (www.europsy.net)**

The EPA scholarship programme is aimed to support early career psychiatrists’ professional development and to facilitate their networking. Scholars have the opportunity to participate actively in the congress, are exempted from payment of the Congress registration fee, have their travel and accommodation expenses covered by the EPA, and participate at the mentors’ luncheon where they have the opportunity to establish mutual agreements for mentorship during the subsequent years with internationally renowned experts. Furthermore, the EPA is organizing a Summer School for psychiatric trainees and early career psychiatrists, which aims at developing clinical skills on topic of relevance for psychiatric practice.

**European College of Neuropsychopharmacology (ECNP) (http://www.ecnp.eu)**

The ECNP fellowship award is presented to individuals who are engaged full-time in clinical or basic research, training or teaching activities in the field of neuropsychopharmacology and closely related disciplines. The posters presented by the Fellowship Award winners are reviewed for publication on the ECNP website, their expenses for participation in the ECNP Congress are covered and they receive a certificate.

**American College of Neuropsychopharmacology (ACNP) (http://www.acnp.org)**

The ACNP annually selects distinguished young scientists in the field of neuropsychopharmacology to be a part of their travel award programme. These awards offer an opportunity to attend an outstanding scientific programme in clinical and basic research on brain–behaviour–drug interactions, become aware of the most
Box 2.1 (Continued)

recent, and often unpublished, advances in psychopharmacology, and meet and interact with internationally distinguished researchers and scientists.

Association for the Improvement of Mental Health Programmes (AIMHP) (http://aim-mental-health.org/)

This Association created the project ‘Leadership development in psychiatry’, which is primarily aimed to provide ECPs with leadership skills. However, the workshops on topics such as ‘How to carry on research and find sponsors’, ‘How to prepare a scientific paper’, ‘How to make a presentation’, the collaborative and informal atmosphere, and the scientific prominence of invited lecturers makes this course a relevant tool for young researchers.

Maudsley Forum (www.maudsleyforum.iop.kcl.ac.uk/)

This is a course aimed at graduate students and European young specialists in psychiatry, and includes topics ranging from epidemiology to genetics, neuroimaging to drug therapy and cognitive-behavioural psychotherapy. For those who have already attended the Maudsley Forum, or who already have basic skills, there is the possibility of joining the Advanced Maudsley Forum, with lessons to design a scientific study, to develop statistical skills necessary to analyse data, to write and publish scientific papers, and to submit results to a scientific conference.

Pittsburgh/Stanford Research Career Development Institute (www.cdipsych.org)

The Career Development Institute for Psychiatry (CDI) is a 4-day intensive institute for junior investigators interested in a research career, with continuing communication with mentors and peers. Its aims are to increase the number of new researchers, to shorten the time between their research training period and initial extramural grant support, to foster relationships among young and senior researchers, and to facilitate peer support and collaborative research among their cohort group of developing investigators.

Creating a network with peers

The establishment of a network with colleagues interested in the same research field provides the possibility of being involved in multi-centre studies or of using the existing network when developing a new research
project. There is no substitute for meeting colleagues in person; however, to maintain regular contacts with colleagues from other countries a number of web tools are available, such as mailing-list groups (e.g. Google groups, Yahoo! groups), Skype or Dropbox.

The participation of young psychiatrists in international meetings and associations is also a very useful way of meeting other persons interested in the same research fields. In this respect, the European Federation of Psychiatric Trainees (EFPT) in 2008 started a research group with the aim to facilitate trainee-led collaborative studies focused on activities relevant for European psychiatric trainees. The EFPT research group has contributed three major projects, presented work at international meetings, and published in major peer-reviewed journals. The group is run through a web-group format, and has representatives from most European countries. Further details are at www.efpt.eu.

### How to conduct a research project: the phases

The Early Career Psychiatrists’ Committee (ECPC) of the European Psychiatric Association (EPA) recently carried out a survey on research experiences during training in psychiatry, which showed that early career psychiatrists are mostly involved in data collection (87 %) and review of the literature (67 %) (Figure 2.1). Some other activities, such as statistical analyses and study design, are often performed by senior colleagues only, resulting in a lack of research experience for early career researchers.

![Figure 2.1](image)

**Figure 2.1** Participation of European early career psychiatrists in the different phases of a research project.
Research projects can be ideally subdivided into the following phases, which will be described in detail in the following paragraphs: (i) development of the study concept; (ii) preparation of the study protocol; (iii) search for funding; (iv) development of study plans and procedures; (v) submission of the study protocol to the Ethics Committee; (vi) implementation and data collection; (vii) data analysis and interpretation of findings.\textsuperscript{18–20}

**Development of the study concept**

Study design is probably the most important stage of a research project. In fact, ‘a bad research idea will produce bad results, no matter how good the methods used are’.\textsuperscript{20} A good study design should be based on: (i) an extensive review of the literature; (ii) relevance of the topic and expected impact of results (including both positive and negative findings) on clinical practice and public opinion; and (iii) discussion with and feedback from the other members of the research group. Hypotheses in scientific research are usually null hypotheses\textsuperscript{19} (i.e. predicting negative results). If a null hypothesis is disproved, then it is reasonable to entertain the opposite (positive results) until this is tested again. The study hypotheses should be prepared with adequate care and be precise and well defined, not vague statements\textsuperscript{19} (i.e. not ‘do rehabilitative interventions have any effect on outcome of bipolar patients?’ but ‘does a 20-session psychoeducational family intervention improve social functioning of bipolar patients compared with a waiting-list control group?’).

**Preparation of a ‘study protocol’**

The ‘study protocol’ should clearly describe the plan for conducting the study, the purpose and function of the study, and how to carry out the study. More specifically, the study protocol should include the rationale of the study, the number of participants, eligibility and exclusion criteria, details of the experimental intervention (and of the control intervention), data collection and data analysis, and ethical considerations. The structure of the protocol is broadly similar across most disciplines, though there are some variations among the different research fields. An example of the headings is given in Box 2.2.

Producing a protocol is a fairly disciplined process. It is important to adhere to the structure of a protocol given by the local ethical committee, funding body or academic department. At this stage, during protocol development and study design, it would be worthwhile to consult a statistician (or a statistically minded colleague) about the study methodology, the data analyses, and whether the proposed design is adequate to answer study aims and research questions.
Search for funding
Whilst a lot of meaningful research can be achieved with minimal funding, to undertake major collaborative projects, and to utilize advanced techniques, such as genetics or neuroimaging, funding is required. Different agencies, such as national ministries for scientific research or health, the European Commission, non-profit organizations, pharmaceutical industries, etc., may offer grants for research activities. In some cases, especially for large or long-term studies, funding may come from more than one source. In any case, researchers must follow a specific process comprising a number of steps, including planning, writing and submitting an application, and going through the peer-review process. Also here, proper guidance will be provided by a research mentor and senior colleagues. However, it is important that researchers participate and gain experience in establishing networks and contacts with colleagues, public and private institutions, etc., and develop fundraising skills, which will be useful throughout their entire research career. Examples of grants dedicated to young researchers are provided in Box 2.3.

Development of study plans and procedures
Before participants are recruited, the study procedures, training and documentation must have been finalized. Good research teams usually develop a ‘Manual of Operations’ (also known as ‘Standard Operating Procedures Document’), which provides detailed steps on study recruitment, enrolment, administration of informed consent, use of study forms

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**Box 2.2 Outline of a study protocol**

Title
Background
Hypothesis to be tested
Aims
Design
Population and sample
Inclusion criteria
Exclusion criteria
Sample size
Effects on clinical practice
Ethical considerations
Statistical analysis
References
<table>
<thead>
<tr>
<th>Box 2.3 Research grants dedicated to early career researchers</th>
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<tr>
<td><strong>European Research Council (ERC) – Starting Independent Researcher Grant</strong></td>
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<tr>
<td>ERC Starting Independent Researcher Grant has been designed to support the establishment of excellent new research teams. Topics of the research proposal are pioneering frontier research in any field of science, engineering and scholarship; the principal investigators can be of any nationality, and must have obtained their PhD, or equivalent degree, more than 2 years but less than 10 years prior to the opening date of the relevant call for proposals. More information available at: <a href="http://erc.europa.eu/index.cfm?fuseaction=home.FILMDownload&amp;fileId=9">http://erc.europa.eu/index.cfm?fuseaction=home.FILMDownload&amp;fileId=9</a></td>
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<tr>
<td><strong>Burroughs Wellcome Fund Career Awards for Medical Scientists (CAMS)</strong></td>
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<td>The CAMS programme is designed to address the ongoing problem of increasing the number of physician scientists and keeping them in research. The programme offers $700 000 over 5 years to bridge postdoc/fellowship training and the early years of faculty service. The ideal candidate will be 2 years from becoming an independent investigator, have at least 2 years or more of research experience, and have a significant publication record. Research proposals must be in the area of basic biomedical, disease oriented, translational, or molecular, genetic or pharmacological epidemiology research. More information available at: <a href="http://www.bwfund.org/page.php?mode=privateview&amp;pageID=188">http://www.bwfund.org/page.php?mode=privateview&amp;pageID=188</a></td>
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<tr>
<td><strong>The European College of Neuropsychopharmacology (ECNP) Research Grant for Young Scientists</strong></td>
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<td>The ECNP Research Grant for Young Scientists aims to provide European young researchers who work in the field of neuropsychopharmacology and related disciplines with the opportunity to expand their knowledge and skills by working on scientific projects in different countries, thereby also creating new international networks. Each year a maximum of three European young scientists are awarded a research grant, which consists of a maximum of 50 000 euros. Further information can be found at <a href="http://www.ecnp.eu">www.ecnp.eu</a>.</td>
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(Continued)
Box 2.3 (Continued)

| European Psychiatric Association (EPA) Early Career Psychiatrists research prize | The EPA provides a special research prize awarded to ECPs, to support their involvement in research activities. The candidates have to meet the following criteria: (i) work as a psychiatrist, or work in research in psychiatry, or be a resident in psychiatry in a European country; (ii) be younger than 40 years of age; (iii) be the first author of a scientific paper published in that year in a journal indexed in the Current Contexts. More information available at: http://www.europsy.net. |
| APA Early Career Award | This award recognizes the best nominated paper published during the year by an early career psychiatrist. It is designed to promote health services research, support young investigators in their research efforts, and recognize significant contributions to the field. More information available at: http://www.psych.org. |

and documentation of data. Study forms may be case report forms, questionnaires, or other data-collection or data-tracking instruments. In this phase it is extremely useful to start a research diary reporting the most important timepoints of the study and with personal annotations, motivations for excluding/including particular subjects and even interesting anecdotes. This will facilitate the analysis of data and the writing up of papers.²⁰

**Submission of the study protocol to the Ethics Committee**

The Ethics Committee (EC) is responsible for ensuring that the study design meets the ethical requirements so that the research may be carried out without risks for participants, ensuring respect of their privacy. The ethical principles to which all researchers should adhere are outlined in the Declaration of Helsinki, developed by the World Medical Association (WMA).²¹ The EC also approves participants’ consent forms and information sheets, where information is provided on procedures, study rationale and possible risks and benefits of participating in the protocol. The process of submitting to an EC can be time consuming; unless all the necessary steps are in order, resubmissions may be requested.


Study implementation and data collection

Study implementation involves recruiting participants, screening them to ensure they meet eligibility criteria, obtaining participants’ informed consent, enrolling, registering and, if appropriate, randomizing participants into the relevant study group. One of the main tasks is to recruit an adequate number of participants in the study to respect the study protocol. Retrospective studies, based on case notes or clinical reports, are not affected by these problems, but the generalizability of their findings is limited. In prospective studies, Lasagna’s law predicts that the recruitment rate will fall by at least half at the moment the study starts. The best way is to incorporate this variability in the study methodology, and to arrange the study so that the estimated number is doubled, widening the survey area or increasing the time for recruitment. There are different approaches to increase the recruitment of subjects: (i) prepare flyers to advertise the study; (ii) establish dedicated services (i.e. assessment or treatment programmes) dedicated to patients who are eligible to be recruited; (iii) offer financial incentives. In all cases, it must be considered that the adoption of these strategies will have an impact on the characteristics of the final recruited sample.

Data analysis and interpretation of findings

The analyses proceed according to the plan outlined in the study protocol. Generally, study aims and research questions should guide the selection of the type of analyses. In addition to the primary analyses, which should have been defined in advance, exploratory or secondary analyses can be performed after the study is completed. Primary analyses are used to reach conclusions, while exploratory analyses are used to generate new ideas or hypotheses for planning future studies. Statistics can be intimidating to anyone, though in the modern era (and with internet aids and new software) all one requires are the broad principles of medical statistics (which can be gleaned from any introductory statistics book). It is worth spending some time acquainting oneself with software programs for analysing data.

Working in research: settings and stages

Research activities may be performed in different settings and institutions, such as universities, governmental agencies, community services, non-profit organizations, pharmaceutical industries or private research facilities. The choice of work setting has to be made according to one’s own priorities, qualifications and even personality. In a survey carried out in 2000 on the preferences of scientists regarding working in industry or in academia, the main reasons for preferring working in
industry were income, availability of advanced technological equipment, career development and advancement. On the other hand, scientists stated that working in universities meant more creative freedom, a stronger learning environment and greater job security.26

In most cases, the mobility of researchers between academia and other settings (especially industries) is limited and predominantly in one direction, with university-trained doctors finding work positions in industry or other research organizations.26 This could be due to the different evaluation of the research activities. In university settings, the academic ‘merits’, represented by original scientific papers and by experience in teaching and mentoring students, are essential for progression into an academic career, whereas in other settings the desired outcomes of research are more related to patenting key discoveries for commercial or other (social, political, etc.) interests.23 Even if variability exists among countries, centres and work-settings, a career in research may be schematically conceptualized as a progression through four different stages.23

**Stage 1. Doctoral training**
A PhD degree represents the highest level, internationally recognized, of academic education. When a medical doctor has completed it, he/she is awarded with the title of PhD (i.e., Philosophiae Doctor). Entry to a funded PhD programme, usually autonomously managed by individual universities, is quite competitive. However, self-funding for a PhD is also possible, though it can be expensive (up to 10 000 euros per year). During a PhD, the researcher has to complete a specific research project. The duration of PhD programmes is 3 to 4 years of full-time work.27 However, in many countries the requirement for a doctoral thesis are expressed as a minimum recommended number of original publications. Therefore, more than 4 years may be needed in some cases, in particular when PhD students experience difficulties related to poorly structured training, insufficient supervision and huge workload from other duties (clinical work, teaching responsibilities, part-time working elsewhere, etc.).

**Stage 2. Postdoctoral training**
There is a great variability in job positions for researchers in this stage. In some countries eligibility for a postdoctoral position does not extend beyond 5–8 years after completion of doctoral training, whereas in other countries postdoctoral researchers may also be doctors in the later stages of their career. Researchers in postdoctoral training may receive specific funding from national funding schemes or from international programmes (e.g. the Marie Curie individual fellowship scheme, or the Human Frontiers science programme), work in different types of teaching position or research project, or receive personal grants or salaries obtained through
highly competitive examinations. This stage represents a true ‘bottleneck’ for establishing a research career, since the number of postdoctoral positions and the opportunities for funding in this stage are very few, thus leading to high competitiveness among early career researchers.

Stage 3. Independent researchers
Universities and other research organizations have a limited number of highly competitive positions in this category, funded by both national and international programmes. Most scientists at this stage receive salaries. Initially, independent researchers work under fixed-term contracts, with low job security, but there are possibilities for tenure, which may range from the assistant/associate professorship in the university to a long-lasting work position in industries and other research agencies. Researchers who succeed in face of the strong competition for funding are usually highly advantaged in achieving academic positions or other research jobs due to the high scientific productivity that they must have shown during this period of their career.

Stage 4. Established scientist stage
This is the final stage of a research career. In the academic institutions it corresponds to the full or associate professor stage. Job titles are quite different in industries, governmental organizations and other research agencies, but nearly all scientists at this stage receive high salaries; however, some of them work under fixed-term contracts. This applies in particular to researchers who work outside academic institutions, and to academics who have not reached high-ranking permanent positions. On the other hand, high demands in teaching and administrative responsibilities faced by full and associate professors are often the main obstacles for remaining competitive in research.

Recommendations for early career psychiatrists interested in research
Some practical advice on what early career psychiatrists should do and know about a career in research is given below. These ten suggestions reflect the authors’ personal experiences and are derived from the available literature.\textsuperscript{11,12,13,21,22}

1. Start early with the help of an experienced mentor: It is advisable that aspiring researchers become active in their local research groups, and attempt to collaborate early with more experienced researchers. Learning how to complete high-quality studies requires membership of a group that publishes regularly, and offers a rich learning environment.
2. *Learn how to read scientific literature*: It is important to first read the abstract, in order to understand the major points of the work, and then attempt to understand the study methodology. One of the best ways to learn how to read scientific literature is by joining a research group.

3. *Keep abreast with international scientific literature*: Improvement of research skills does not finish when early career psychiatrists complete their training, but it is a life-long learning activity. Researchers have to devote a considerable part of their time to continuously updating their knowledge of scientific literature.

4. *Create a network*: Creating (or joining) a network is essential for many reasons, including the possibility of being involved in multi-centre studies or of using an existing network when trying to develop a project. There is no substitute for a face-to-face meeting, though regular web-based contact can be very useful.

5. *Develop innovative strategies for funding*: A major problem faced by young researchers is the scarcity of resources. In turn, this stimulates innovative strategies to obtain adequate financing, such as sponsorship from private institutions without specific interests (e.g., large local firms, foundations, industry associations).

6. *Learn how to work fairly in collaboration with pharmaceutical companies*: The pharmaceutical industry provides a large amount of funding to prospective researchers, and working with them can have some benefits. However, it is important for ECPs to establish and follow some specific rules and ethical principles to govern their relationship with industry and/or ask for advice from more experienced researchers.

7. *Don’t spend too much energy on too many projects*: Early career psychiatrists who want to start a research career usually tend to work on every opportunity offered. Acquiring as much experience as possible is fundamental; nevertheless, it is advisable to focus on a specific field.

8. *Do not choose an ultra-specialized research topic too early*: On the other hand, a very narrow focus may be a mistake for young psychiatrists. It is important to keep in mind the ‘big picture’ of the complexity of mental disorders.

9. *Keep a close link with clinical experience*: As for any other medical specialty (and probably more so), in psychiatric research it is always important to draw new ideas for research from clinical experience. This can give critical perspectives on data that at times conflict with the literature.

10. *Cultivate personal qualities*: The real secret of good research is the people involved. Good researchers have qualities such as humility, curiosity, a spirit of cooperation and perseverance.
Conclusions

Despite many difficulties experienced by early career psychiatrists in starting a research career, the significant attention paid by the public and private agencies to the development of a new generation of researchers in psychiatry, and the increased opportunities for research training and funding, make this decade one of the best times ever to undertake a career in research. The role of modern research in psychiatry is clear: it is to produce evidence that will help improving mental health care and, hence, the lives of many people with mental health problems. The new possibilities offered by recent advances in psychiatry and neuroscience bring hope that in the coming years research in the mental health field will significantly improve. The genomic revolution will probably soon enable us to track the pathogenic processes in many psychiatric disorders to their roots in molecular abnormalities and allow better pharmacological treatments. At the same time, the evidence-based support for psychotherapeutic and other psychosocial interventions is constantly increasing, and technologies for epidemiological, cognitive and social science research have also advanced markedly. These advances, particularly if they are achieved in collaboration with other medical professionals (geneticists, psychologists, etc.), will require a vision and an understanding of the complexity of the mental functioning and illnesses that only psychiatrists have. Therefore, this will constitute one of the major challenges for the new generation of psychiatrists.

References

8. Union Européenne des Médecins Spécialistes (UEMS) – Section and Board of Psychiatry (www.uempsychiatry.org).

