Introduction
This Month's Selections

The Early Career Psychiatrists section articles in this month's *Journal* represent important areas in our field that deserve focused research, clinical, and educational efforts.

In addition to the 3 excellent articles in this section, I would like to draw attention to Dr. Joseph Goldberg's editorial on the challenges currently facing those who select a career in academic psychiatry. As Dr. Goldberg discusses, our field may face a critical crisis of loss of talent and meaningful research due to the acute pressures regarding funding. Individuals at early career stages may be especially vulnerable to such forces, but the problems outlined in the editorial affect the entire field of psychiatry and its practice. The challenges facing those pursuing academic research careers are daunting, and we invite responses with solutions or commentary for publication in this section from leaders in our field and in research, including representatives of the National Institutes of Health, department chairs, training directors, the American Psychiatric Association, industry, and other parties with a stake in the next generation of academic psychiatrists.

In one of the articles in this section, Fan and Hassell report the results of a systematic review of bipolar disorder and personality disorders. Efforts to understand psychiatric comorbidity and to make psychiatric research more generalizable to clinical populations advance our efforts to provide effective treatments across clinical settings. As the authors discuss, the detection of comorbid personality disorders in individuals with bipolar disorder and the development of rational treatment studies focusing on this comorbidity are of great importance, as "comorbid personality disorders are associated with a lower medication compliance rate, lower rate of clinical recovery, lower functional level, higher rates of suicidality, and higher rates of substance abuse." The authors thoughtfully provide suggestions for clinical treatment and future research based on their findings.

Van Duijn et al. conducted a study to further our understanding of the prevalence and impact of psychiatric disorders in Huntington's disease (HD). Medical comorbidity, in addition to psychiatric comorbidity, is an area in which more research is needed to inform psychiatric screening efforts, diagnosis, and treatment. The group investigated the prevalence of psychiatric disorders in HD mutation carriers and compared the prevalence to that in verified first-degree related noncarriers, as well as in the general population. HD poses interesting dilemmas and opportunities for study and intervention, as it is an autosomal dominant condition for which genetic testing is available. Therefore, assessment of psychiatric comorbidity and its impact can be ascertained before symptoms of HD appear. The study of psychiatric risk in HD has profound applications in situations in which HD has already been manifest, and there is also an opportunity with the advent of genetic testing to prevent or minimize psychiatric symptoms in those who have been found to be carriers but have not yet developed HD. The investigators found that major depressive disorder (MDD) and obsessive-compulsive disorder were more prevalent in HD mutation carriers than in the general population. This was true for both presymptomatic and symptomatic HD mutation carriers. In fact, symptomatic carriers did not differ from those who were presymptomatic in terms of prevalence of psychiatric disorders. As the authors discuss, the lack of prevalence differences between carriers and noncarriers in at-risk families shows a lack of impact of environmental factors such as the stress of being raised in a family with the disease burden associated with HD, or the stress of being at risk in early life.

The authors discuss that their findings indicate a neurodegenerative mechanism for psychiatric disorders in HD, although the nonblinding of subjects and interviewers to genetic status is an acknowledged limitation for this interpretation.

Pundiak et al. conducted a study in another important area of psychiatry in which we need data to inform treatment. In their naturalistic study, they assess the impact of selective serotonin reuptake inhibitors (SSRIs) in the long-term management of MDD. The investigators included all eligible patients in a community clinic who had responded to SSRI monotherapy and experienced remission for a 5-year period. After 5 years, 87 patients were considered for medication discontinuation, based on patient preference (after reviewing risks and benefits) and clinician judgment. SSRIs were tapered over 2 to 5 months, and psychoeducation about signs and symptoms of relapse was provided. Patients were assessed every 3 months for up to 8 years. Sixty patients decided to continue SSRI therapy, while 27 elected to discontinue. Those in the SSRI continuation group had a significantly greater likelihood of remaining well throughout the study. In the first year alone, 62% of those who discontinued medication relapsed, compared to 26% of those who continued medication. Higher baseline depression scores prior to treatment initiation were associated with relapse, while age, gender, SSRI dose, and previous number of depressive episodes did not predict relapse. These findings underscore that even after a period of remission, discontinuation of maintenance therapy increases the risk of recurrence. These results are informative and crucial. First, they underscore the chronic and recalcitrant nature of MDD. Second, the results provide directions for future study in an area that has received inadequate study. Across psychiatric disorders, we have more data to inform acute treatment than long-term or maintenance therapy, although the burden for patients is over years and not the weeks generally represented by most of our intervention studies. Studies of longer duration are challenging. Resources are needed to treat and follow participants over time, and most investigators struggle to both enroll and retain participants in protocols.

We hope that you find the articles in this section informative, and we thank the Early Career authors for their inspiring work and contributions.

To provide feedback on the Early Career Psychiatrists section, please contact me at mfreeman@psychiatrist.com.

Marlene P. Freeman, M.D.
Vice–Editor in Chief

Commentary

Academic Psychiatry: The Effects of Gravity on Career Trajectory

In this issue of the Early Career Psychiatrists section, our guest editorial from Joseph F. Goldberg, M.D., addresses serious and systemic difficulties facing the present and future generations of clinical researchers in our field. The challenges are daunting, and resources are scarce to acutely and systematically address the problems. The stakes are high. Despite great advances in psychiatry, there are seemingly endless clinical questions that deserve the time and effort of researchers. The prevalence, severity, and broad impact of psychiatric disorders on individuals and society warrant investment in clinical research.

We are at risk of stagnation as a field, as we consider the issues that may contribute to a critical crisis of loss of talent and productivity in clinical research. Individuals at early career stages may be especially vulnerable to such forces, but the problems outlined in the editorial affect the entire field of psychiatry and its practice.

On the other hand, the opportunities within academic psychiatry are exciting and unique. There is a rich diversity of activities that are available to early career psychiatrists interested in academic psychiatry. The academic triad to which Dr. Goldberg refers—research, teaching, and clinical care—is for some of us the dream job. The unanswered clinical questions, or "unknowns," to which he refers have motivated many academic psychiatrists to pursue clinical research. It is a vibrant career path to seek further clarity though research, implement changes in clinical care, and disseminate information that directly affects the quality of people's lives. With pressures for funding so heavy, there is an integral need for early career psychiatrists to be able to envision success in terms of a spectrum of job descriptions. It takes creativity and tenacity to stay in the game, and compromises are often necessary to do so. Also, many of us will find ourselves with tough choices, such as decisions about collaborations to create economies of scale, making less money than counterparts outside of academics, pursuit of writing and research on one's own personal time, and selection of institutions that best support one's own academic mission. Not everyone wants or is able to compromise in those areas, and at least a certain amount of frustration tolerance is required. Fortunately, psychiatry is a field in which important contributions can be made in many ways. We will be best served as a field to assist those who are highly passionate and qualified to pursue research and teaching. It will take a combination of individuals' scrappiness and creativity, and investment and commitment at every level to optimally ensure that clinical research moves forward in psychiatry.

We hope to stimulate dialogue and collaboration in improving the potential success of the talented and dedicated

psychiatrists who chose clinical research as a career path. We invite responses for publication from leaders in our field and in research, including representatives of the National Institutes of Health, department chairs, training directors, the American Psychiatric Association, industry, and other parties with a stake in the next generation of academic psychiatrists.

As always, we invite your feedback. Please contact me at mfreeman@psychiatrist.com with suggestions, feedback, or comments.

Marlene P. Freeman, M.D.
Vice–Editor in Chief

Guest Editorial
Whither the Academic Psychiatrist?

Not so long ago, careers in academic medicine were among the most coveted and revered professional trajectories imaginable. Whereas once, physicians with excellence in teaching, research, and patient care—the so-called "triple threat"—represented an endangered species,[1–3] today they are unlikely to find a viable habitat. Training programs, from medical school through residency, continue to offer research exposure both formally (e.g., the Medical Scientist Training Program, research tracks within residency curricula, and postgraduate fellowships) and informally (by way of summer programs, electives, and mentorship experiences), but what comes next? From the harsh economic standpoint of professional viability, traditional careers as salaried medical school faculty depend increasingly on one's ability not to teach well or provide outstanding clinical care but to procure external funding to support one's own salary (and the salaries of support staff and related expenses). Though research comprises only one leg of the idealized academic triad, fundraising (usually via research grants) has become the dominant professional activity of academic physicians employed by medical schools.

Grant procurement once represented a means to an end, a mechanism that allowed academic physicians to pursue creative initiatives and test researchable ideas by generating empirical data for the sake of scholarship. Now more an end in itself, the generation of revenue for one's own salary and for one's institution through indirect costs from research grants has become the driving force behind personal job security, not to mention an essential benchmark for academic promotion. In many instances, tenure of title has largely been uncoupled from tenure of salary, and service to one's institution through teaching, committee membership, or clinical supervision are uncompensated activities one is expected to perform alongside other time donated to serving on extramural study sections, providing peer reviews for journals, and—last but not least—writing one's own papers for peer-reviewed publication.

It may be asked, does one acquire grants in order to write up data, or acquire data in order to write grant proposals? Small grants based on competitive applications still allow early career psychiatrists to get a foot in the door (e.g., young investigator awards or fellowships and foundation awards), but their value is largely honorific, since they typically provide only nominal funding for salary and expenses to conduct relatively small projects. Moreover, private foundation grants typically provide much lower indirect cost revenues to an institution than do federal grants. In an era when many institutions now demand mandatory minimum indirect costs before junior faculty can accept an awarded grant, departmental congratulations may immediately be followed by a request to identify "some other source" from which to make up any monetary shortfall to the institution. Research grants from the pharmaceutical industry—flowing almost like a rampant stream in the 1990s—have now become a mere trickle, as once-novel pharmacotherapies start coming off patent, sponsors shudder to fund studies for off-label uses in the wake of litigated claims against off-label promotion, and the pharmaceutical industry itself reels from unprecedented scrutiny for any and all funding to medical education or research.

Career development awards from the National Institute of Mental Health (NIMH) (i.e., K-awards), previously viewed as the stepping-stone to larger RO1 grants, are increasingly coveted not just for their prestige but more pragmatically because they offer safe haven, as funding lines have shrunk and numbers of awards have become drastically reduced at mentored entry levels (e.g., K-01, K-08, K-23) and curtailed or capped for renewal at mid-career (e.g., K-02) and senior (i.e., K-05) levels.[4] In fact, NIMH efforts to shift more funding from established to first-time investigators[5] may well create a "K to R" funding gap, and potentially a disservice to young investigators encouraged to walk down a pathway that has no steps soon after it begins. Solutions for salary-seeking academic early career psychiatrists will demand as much of a federal or private focus on second and third tiers as on first steps and training grants—although no signs of such initiatives appear on the horizon.

The National Institutes of Health (NIH) now offer loan repayment programs for early career psychiatrists committed to pursuing research careers—a glimmer of hope and opportunity—but, once trained and prepared for an academic career, the greatest challenges still lie ahead as would-be junior faculty risk finding themselves all dressed up with no place to go. Department chairs often provide temporary bridge funding for the salaries of junior faculty (rather like stock leveraging),

but the stakes run high when all parties are gambling that a federal grant (or 2 or 3) will eventually materialize (and lead to further funding). Departments can cobble salary packages together by apportioning various percentages of an early career psychiatrist's salary to the existing funded research of other established investigators, but inevitably there lingers the precarious nature of competitive grant renewals, loss of funding, and annual uncertainty about the source of one's future income.

Data from the American Association of Medical Colleges and from NIH indicate a steady decline since the early 1990s in both medical school graduates' expressing interest in research careers as well as first-time NIH grant applications from physicians, including those within psychiatry.[2] The implications for a decline in psychiatrist clinician-investigators affect all of psychiatry. Beyond hopes for a better refinement of diagnostic classification and the underpinnings of disease state, as well as new therapeutics (both biological and psychosocial), research-informed psychiatrists are those we entrust to educate future generations of practitioners about how to understand and think about patients scientifically. Furthermore, with a pervasive focus in federal funding on "translational" research, there arises concern about who will be sufficiently skilled and informed about clinical disease state and relevance to "translate" basic science findings back to the bedside.

Without academic psychiatrists, perhaps the greatest risk is that of scientific illiteracy among general practitioners—both readers and reviewers of the peer-reviewed literature as well as everyday clinicians who make medical decisions "in the trenches." The detective work of clinical medicine trains doctors to form and test falsifiable hypotheses, find plausible explanations for problems, and search the literature for precedents when necessary to support or refute an argument. What some now call "evidence-based practice" is little more than applying a personal knowledge base of what has and has not been studied for a given ailment, knowing the ways in which one can or cannot generalize from research studies to everyday situations, and replacing opinion with fact whenever fact exists. A "scholarly" clinical assessment involves drawing on that knowledge base and integrating it with one's personal experiences to tailor decision-making to the characteristics and needs of an individual patient. Apart from research-based academicians, medical schools hire practitioners within so-called "clinician-educator" tracks to both treat patients and teach residents and medical students,[6] although increasing demands to provide reimbursable direct clinical service often constrain the extent to which adequate time is protected for scholarship.

Mindset may be the last guaranteed sanctuary, albeit internal, for academically inclined early career psychiatrists. Just as managed care largely caused medical schools to uncouple their educational mission from their provision of reimbursable services, psychiatrists can choose as individuals to adopt an academic stance in whatever setting they ply their trade. Meanwhile, the role of medical school voluntary faculty may become increasingly vital to residency and fellowship training if the attention of salaried staff remains dominated by fundraising and administration. Today, academically minded psychiatrists increasingly may find themselves vacating full-time medical school appointments in favor of private practice, industry, voluntary teaching, and other creative solutions to an otherwise beleaguered institutional system.

Models for adopting an academic mindset abound elsewhere in medicine. Consider when an oncologist, informed by data from clinical trials, counsels a breast cancer patient on the relative merits and survival outcomes of lumpectomy with radiation versus radical mastectomy; or, similarly, when a knowledgeable cardiologist explains the alternatives to angioplasty for coronary artery disease; or a gynecologist gives an informed perspective on the risks and benefits of postmenopausal estrogen replacement therapy. Should psychiatrists adopt a stance any less scientifically rigorous when explaining the risks and benefits of antidepressants for bipolar depression, the circumstances under which lithium maintenance therapy is more or less likely to protect against affective recurrences, the indications for clozapine or electroconvulsive therapy, or the data behind suicide risk and psychotropic drug classes? Who will knowledgeably tell patients the differential relapse rates of medication with versus without psychotherapy for chronic depression? Who will explain the relevance of longitudinal course for diagnostic validation in children with mood instability and disruptive behavior?

And who will help psychiatrists-in-training know how to determine, for themselves, whether the rightful answer to a question is or is not an unknown?

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