

Seminars in Psychiatric Genetics

College Seminars Series

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Seminars in Psychiatric Genetics

By

Peter McGuffin, Michael J. Owen,

Michael C. O'Donovan,

Anita Thapar & Irving I. Gottesman

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Contents

The authors	vi
Foreword. <i>Series Editors</i>	vii
Preface	viii
1 The cell and molecular biology	1
2 Quantitative genetics	30
3 Linkage and association	55
4 Mental retardation	66
5 Schizophrenia	87
6 Affective disorders	110
7 Neurotic disorders	128
8 Personality disorders and criminal behaviours	146
9 Alcoholism	161
10 Childhood disorders	174
11 Dementia	192
12 Genetic counselling and ethical issues	218
Index	226

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Foreword

Series Editors

The publication of *College Seminars*, a series of textbooks covering the breadth of psychiatry, represents a new venture for the Royal College of Psychiatrists. At the same time, it is very much in line with the College's established role in education and in setting professional standards.

College Seminars are intended to help junior doctors during their training years. We hope that trainees will find these books useful, on the ward as well as in preparation for the MRCPsych examination. Separate volumes will cover clinical psychiatry, each of its subspecialties, and also the relevant non-clinical academic disciplines of psychology and sociology.

College Seminars will also make a contribution to the continuing medical education of established clinicians.

Psychiatry is concerned primarily with people, and to a lesser extent with disease processes and pathology. The core of the subject is rich in ideas and schools of thought, and no single approach or solution can embrace the variety of problems a psychiatrist meets. For this reason, we have endeavoured to adopt an eclectic approach to practical management throughout the series.

The College can draw upon the collective wisdom of many individuals in clinical and academic psychiatry. More than a hundred people have contributed to this series; this reflects how diverse and complex psychiatry has become.

Frequent new editions of books appearing in the series are envisaged, which should allow *College Seminars* to be responsive to readers' suggestions and needs.

*Hugh Freeman
Ian Pullen
George Stein
Greg Wilkinson*

Preface

In about 1977, one of us, then a psychiatric registrar, had a conversation with one of his teachers, an eminent professor of social psychiatry, about an essay just submitted for Part I of the University of London MPhil in Psychiatry. This reviewed work by various groups, including the registrar and his colleagues, on possible associations between HLA and schizophrenia, and contained a proposal for a genetic linkage study with HLA and other markers. "Extraordinarily arcane," was the professor's judgement, carrying with it the implication that a young Maudsley doctor should find better things to do with his time.

Seventeen years on, there is still no replicated genetic linkage in schizophrenia, but recombinant DNA technology has revolutionised our understanding of many other diseases. The gene for Huntington's disease has been identified, and three different loci definitely involved in the aetiology of Alzheimer's disease are the subject of intense investigation. So-called positional cloning approaches are successfully being applied to complex non-Mendelian disorders such as familial cancers and coronary heart disease, and there is much justifiable optimism that there will soon be important advances in schizophrenia, manic depression, and perhaps other disorders.

Our aim in writing this book has been to try to convey some of the current excitement about prospects for molecular genetic research in psychiatry, while not overlooking the pitfalls. At the same time, we wish to stress that the subject has arrived at the threshold of a new molecular phase, having been carried there by the cumulative advance of older, pre-molecular technologies. Furthermore, although family, twin, and adoption studies have been extensively exploited in disorders such as schizophrenia and manic depression, their usefulness has still not been exhausted and their systematic application in some other disorders has scarcely begun.

Like other volumes in the *College Seminars Series*, this book is mainly aimed at trainee psychiatrists, but takes them beyond what they need to know about genetics simply for the purpose of passing postgraduate examinations. We hope that the book, although necessarily concise, is sufficiently comprehensive to be also of interest to qualified psychiatrists, as well as to geneticists, clinicians and researchers in allied fields. It is a measure of the current vigour of research in psychiatric genetics that quite a few essential new references have had to be added at the proof stage, and despite our best efforts, some sections will almost certainly become out of date fairly soon after publication. Finally, we hope that this book

will help contribute to the positive and growing general interest in the genetics of psychiatric disorders that has been evident in recent years, and help do away with any lingering idea that research in the area is only for lovers of the obscure.

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