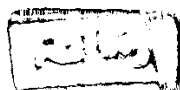


# THE MOLECULAR FOUNDATION OF PSYCHIATRY



Thesis  
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Fulfilment of the Master Degree  
of Neuropsychiatry

By  
*Mona Medhat Reda*

## SUPERVISORS

*Prof. Ahmed Okasha*  
Prof. of Neuropsychiatry  
Ain Shams University

*Prof. Farouk Lotaeif*  
Prof. of Neuropsychiatry  
Ain Shams University

*Dr. Magd Zakaria*  
Ass. Prof. of Neurology  
Dept. of Neuropsychiatry  
Ain Shams University

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



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## CONENT

|                                                   | Page  |
|---------------------------------------------------|-------|
| List of Tables .....                              | ii    |
| List of Figures .....                             | iii   |
| List of abbreviations .....                       | v     |
| Genetic Glossary .....                            | viii  |
| * Introduction .....                              | xv    |
| * Aim of the work .....                           | xvii  |
| Chapter I: Genetic review .....                   | 1-37  |
| Historical review .....                           | 1     |
| Basic Genetics .....                              | 4     |
| Human Genome .....                                | 8     |
| Modes of Inheritance .....                        | 16    |
| Genetic Studies .....                             | 23    |
| Genetic research approaches .....                 | 27    |
| Statistical approaches .....                      | 32    |
| Human Gene Mapping .....                          | 36    |
| Gene Therapy .....                                | 37    |
| Chapter II : Brain Receptors .....                | 38-65 |
| Types .....                                       | 38    |
| Mechanism of action .....                         | 40    |
| Chemical Neurotransmission .....                  | 44    |
| Signal transduction .....                         | 46    |
| Transsynaptic regulation of gene expression ..... | 53    |

|                                                                                                  | Page   |
|--------------------------------------------------------------------------------------------------|--------|
| Chapter III : Neurotransmitters                                                                  | 64-86  |
| Catecholamines .....                                                                             | 64     |
| Serotonergic .....                                                                               | 71     |
| Cholinergic .....                                                                                | 75     |
| Histamine .....                                                                                  | 77     |
| Amino acids .....                                                                                | 80     |
| Chapter IV : Molecular mechanism underlying aetiology<br>and treatment of psychiatric disorders. | 87-111 |
| Schizophrenia .....                                                                              | 89     |
| Mood Disorder .....                                                                              | 95     |
| Anxiety .....                                                                                    | 104    |
| Drug addiction .....                                                                             | 108    |
| Chapter V: Gene - environment interaction                                                        | 112    |
| Discussion .....                                                                                 | 120    |
| Conclusion .....                                                                                 | 129    |
| Recommendations .....                                                                            | 131    |
| Summary .....                                                                                    | 132    |
| References .....                                                                                 | 134    |
| Arabic Summary                                                                                   |        |

### List of Tables

| Tables                                                                        | Page |
|-------------------------------------------------------------------------------|------|
| 2-1 Neurotransmitters and receptor types. . . . .                             | 40   |
| 2-2 Neurotransmitter receptors reported in the brain. .                       | 45   |
| 2-3 Second messenger and their associated activator. . .                      | 47   |
| 2-4 Transcription factors in the brain . . . . .                              | 54   |
| 3-1 Localization of monoamines and acetylcholine in the<br>brain . . . . .    | 78   |
| 3-2 Receptor subtypes for biogenic amine neurotransmit-<br>ters . . . . .     | 79   |
| 3-3 Examples of biogenic amine and peptide coexistence<br>in neurons. . . . . | 83   |
| 3-4 Some peptide neurotransmitter receptor subtypes. . .                      | 86   |

### List of Figures

| Figures                                                                                          | Page |
|--------------------------------------------------------------------------------------------------|------|
| 1-1 Double helix DNA.....                                                                        | 5    |
| 1-2 Structure of gene.....                                                                       | 8    |
| 1-3 Protein synthesis I.....                                                                     | 10   |
| 1-4 Protein synthesis II.....                                                                    | 11   |
| 1-5 Regulation of potein synthesis.....                                                          | 15   |
| 1-6 Southern blotting.....                                                                       | 26   |
| 2-1 Coupling of receptors and ion channels.....                                                  | 42   |
| 2-2 Mechanism of G protein activation - deactivation..                                           | 43   |
| 2-3 Messenger system.....                                                                        | 48   |
| 2-4 Protein phosphorylation.....                                                                 | 49   |
| 2-5 Regulation of gene expression by phosphorylation...                                          | 52   |
| 2-6 Intracellular pathway underlying transsynaptic<br>regulation of gene expression part I.....  | 57   |
| 2-7 Intracellular pathway underlying transsynaptic<br>regulation of gene expression part II..... | 59   |
| 3-1 Catecholamine synthesis.....                                                                 | 65   |
| 4-1 Acute opiate action on locus coeruleus.....                                                  | 110  |
| 4-2 Chronic opiate action on locus coeruleus.....                                                | 111  |
| 5-1 Gene-Environment interaction.....                                                            | 119  |

## LIST OF ABBREVIATIONS

|                  |                                                                            |
|------------------|----------------------------------------------------------------------------|
| A                | Adenine                                                                    |
| AAC              | Agonist Affinity Conformation                                              |
| AC               | Adenyl Cyclase                                                             |
| Acetyl CoA       | Acetyl Coenzyme A.                                                         |
| AMPA             | 8,1- $\alpha$ amino -3- hydroxy -5- methyl -4- isoxazole<br>propionic acid |
| ASO              | Allel Specific Oligonucleotide                                             |
| ATP              | Adenosine Triphosphate                                                     |
| C                | Cystosin                                                                   |
| c-AMP            | cyclic Adenosine Menophosphate                                             |
| Ca <sup>2+</sup> | Calcium ions                                                               |
| CCK              | Cholysystokinin                                                            |
| c-DNA            | Probe coding DNA                                                           |
| c-GMP            | Cyclic Guanosine menophosphate                                             |
| Cl <sup>-</sup>  | Cloride ions                                                               |
| CNS              | Central Nervous System                                                     |
| CRE              | Cyclic AMP Response Element                                                |
| CREB             | Cyclic AMP Response Element Binding                                        |
| CSF              | Cerebro Spinal Fluid                                                       |
| CT               | Computed Topography                                                        |
| D                | Depamine Receptors.                                                        |
| DAG              | Diacylglycerol                                                             |
| DNA              | Deoxy ribonuclic Acid                                                      |



|                |                                 |
|----------------|---------------------------------|
| DZ             | Dizygotic                       |
| EAA            | Excitatory Amino Acids          |
| EEG            | Electroencephalogram            |
| G              | Guanine                         |
| GAD            | Glutamine Acid Decarboxylase.   |
| GAD            | Generalized Anxiety Disorder    |
| Gi             | Guanosine Inhibitor             |
| Go             | Guanosine with Unknown Function |
| Gs             | Guanosine Stimulator            |
| GABA           | Gamma-Amino Butyric acid        |
| GDP            | Guanosine diphosphate           |
| GP             | Globus Pallidus                 |
| GTP            | Guanosine Triphosphate          |
| <sup>3</sup> H | Haloperidol                     |
| 5HIAA          | 5 Hydroxy Indol Acetic Acid     |
| 5HT            | 5 Hydroxy Treptamine            |
| IEG            | Immediate Early Genes           |
| IP3            | Inositol Triphosphate           |
| IPs            | Inositol Phosphates             |
| LG             | Ligand Gated Channel            |
| M.             | Muscarenic receptors            |
| MAO            | Monoamine Oxidase               |
| MDP            | Manic-Depressive psychosis      |
| MRI            | Magnatic Resonant Image         |
| m-RNA          | Messenger Ribonucleic Acid      |

- vii -

|                  |                                         |
|------------------|-----------------------------------------|
| MZ               | Monozygotic                             |
| Na <sup>++</sup> | Sodium Ions                             |
| NE               | Norepinephrin                           |
| NMDA             | N-methyl-D-aspartic acid                |
| NPY              | Neuropeptid Y.                          |
| 8OH-DPAT         | 8 Hydroxy dipropylamino tetraline       |
| PCR              | Polymerase Chain Reaction               |
| PET              | Positron Emission Tomography            |
| PIP2             | Phosphatidyl Inositol 4,5 biphosphate.  |
| PKC              | protein Kinase C.                       |
| RCACS            | Receptor Coupled Adenyl Cyclase System  |
| REs              | Restriction Enzymes                     |
| RNA              | Ribo Nucleic Acid                       |
| SSRIs            | Serotonin Specific Reuptake Inhibitors. |
| T                | Thiamine                                |
| t-RNA            | transfer-Ribonucleic Acid               |
| U                | Uracil                                  |
| VIP              | Vasoactive Intestinal Peptide           |
| VTa              | Ventral Tegmental Area                  |
| 1YP-MD           | 1 Year Prevalence of Major Depression.  |