APPLICATION OF RECOMBINANT DNA TECHNOLOGY IN FRAGILE -X SYNDROME

THESIS
SUBMITTED IN PARTIAL FULFILMENT FOR THE DEGREE OF M.D. HUMAN GENETICS

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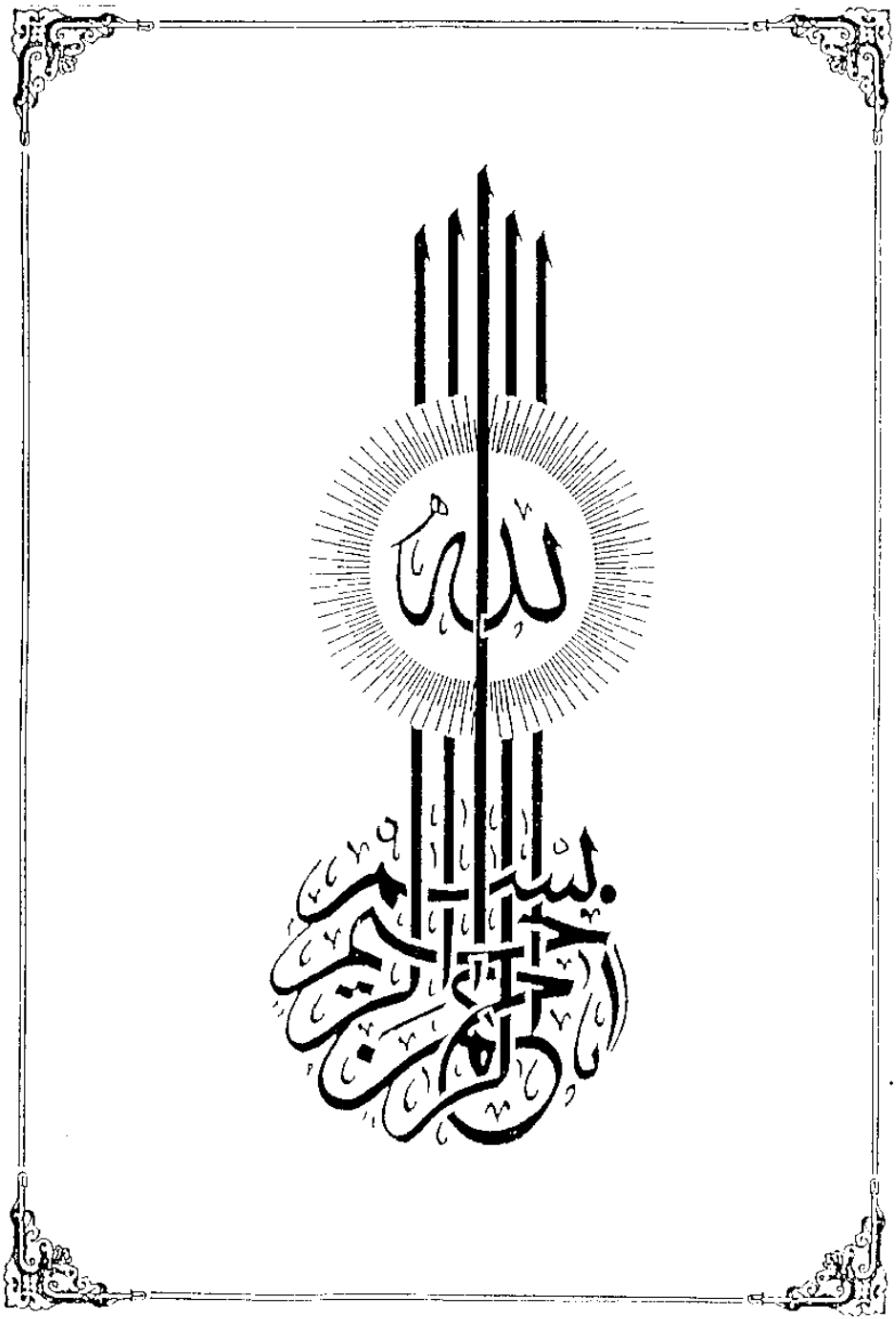

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Contents

page

Names' intials & file number corresponding to the given case number

Group A :

Egyptian cases:

Family No.	*Pedigree No.*	*Intials*	*File No.*
1	II.2	mother of SF	3508
	III.4	SF	
	III.3	AF	
2	I.2	mother of AA	4746
	II.1	AA	
	III.3	MA	
	II.6	Az A	
3	II.8	HF	2689
	II.2	TF	
4	I.2	RH	1750
	II.3	AH	
	II.2	HH	
	II.1	YH	
5	II.2	mother of A El	
	III.3	A El	
	III.2	Y El	
6	I.2	mother of SS	4640
	II.5	SS	
7	I.7	mother of A Eb	6597
	III.4	A Eb	
8	II.1	Kh Ab	2750

German cases :

Family No.	*Pedigree No.*	*File No.*
9	II.2	922
	III.3	923
	III.2	924
	II.3	1306
10	I.2	948
	II.2	950
	II.1	949
11	I.1	I
	II.2	II
	III.2	0
	II.3	840
	III.3	838
	II.4	833
12	I.12	972
	II.1	973
	II.2	974
13	II.3	1196
	II.1	Udo
	II.2	1197
14	II.4	1121
	III.3	1127
	II.5	1109
15	II.2	976
	III.2	975
	III.1	988
16	III.3	980
	IV.1	970
	III.2	982
17	III.5	1824
	III.6	1825
	II.2	642
	III.3	1822
	III.4	1815
	IV.1	606
	IV.2	508
	III.1	france

Family No.	*Pedigree No.*	*File No.*
18	No Pedigree	1028
		1029
19	II.1	764
	I.2	765
20	I.2	7
	II.1	6
21	III.2	17/88 f.
	IV.2	17/88 m.
22	I.2	18
	II.2	19
	III.1	22
	III.2	23
23	II.2	12
	III.3	5
	III.2	4
24	I.2	9
	II.1	8
25	I.2	8796
	II.2	8797
	III.2	8545
	IV.1	8546
	IV.2	8748
	III.3	8798
26	II.6	9484
	II.5	9339
27	III.3	9425

Group B :

Egyptian Cases:

Case No.	*Intials*	*File No.*
1	AR	5669
2	AEb	949
3	I Ab	
4	RM	2711
5	NM	
6	Ksh	7027
7	NEl	
8	AA	6582
9	TEl	
10	AS	6549
11	FAb	
12	MEb	
13	FAb	6856
14	FN	886
15	AN	
16&17		6800
18&19		6801
20&21		6603
22&23		5948

German cases :

Case No.	*File No.*
1	22/92
2	115
3	273/92
4	269/92
5	301/92
6	348/92
7	151
8	Höpack
9	311
10	431
11	700
12	719
13	695
14	704
15	455
16	457
17	456
18	968
19	969
20	918
21	919
22	920
23	20
24	21
25	1036
26	1016
27	1124
28	1152
29	1061
30	913
31	641
32	771
33	776
34	759

List of Tables

Page

List of Figures

Page

List of Abbreviations

APS	Ammoniumperoxodisulfate
ATP	Adenosine triphosphate
bp	base pair
C	Cytosine
cDNA	complementary DNA
CTP	Cytosine triphosphate
CGG	Cytosine Guanine Guanine
C.V.S.	Chorionic Villus Sample
d ATP	deoxy Adenosine triphosphate
d CTP	deoxy Cytosine triphosphate
d GTP	deoxy Guanosine triphosphate
d TTP	deoxy Thymidine triphosphate
d UTP	deoxy Uridine triphosphate
DNA	deoxy ribonucleic acid
Dig.	Digoxigenin
DMSO	Dimethylsulfoxide
EDTA	Ethylendiamintetraacetat
g	gram
H2O	Water
HGD	Human Genetics Departement
hn RNA	heterogeneous nuclear ribonucleic acid
IHG	Institute of Human Genetics
Kb	Kilobase
KD	Kilodalton
LMP-agarose	Low melting point agarose
L/V/I-G	Leucine/valine/Isoleucine-Glycine
mRNA	messenger RNA
M-B	Martin-Bell syndrome
MCS	Multiclonal sites (in plasmid vector)
MR	Mental Retardation
MHH	Medizinische Hochschule Hannover
NTM	Normal Transmitting Male