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**Lipid ligand - protein receptor interactions
characterised by a resonant mirror biosensor**

by

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CONTENTS

List of Tables	iv
List of Figures	v
List of Abbreviations	ix

Chapter 1: Literature review: Lipids and auto-immunity

1.1	Auto-immunity	1
1.2	Idiotype-anti-idiotypic relationships	2
1.3	Idiotype network theory	4
1.4	Parallel sets	6
1.5	Induction of auto-immunity through idiotypic interactions	8
1.6	Regulation of the idiotypic network	9
1.7	Immunomodulation	12
1.8	Molecular mimicry and lipid antigens	13
1.9	Problems of detection of idiotype-anti-idiotypic relationships	14
1.10	Biosensor technology in detection of idiotype-anti-idiotypic relationships	15
1.11	Lipid antigens and auto-immunity in biosensor technology	15
1.12	Auto-immunity in Guillain-Barré syndrome, tuberculosis and human immune deficiency virus/acquired immune deficiency syndrome	16
1.13	Aims	17

Chapter 2: Lipid antigen immobilisation on a biosensor surface

2.1	Introduction	18
2.1.1	Biosensor technology	18
2.1.2	Practical considerations	20
2.1.2.1	Thickness of the ligand coat	20
2.1.2.2	Type of cuvette surface	21
2.1.2.3	Mass transfer	21
2.1.2.4	Regeneration	22
2.1.2.5	Resonance scan diagnostics	22
2.1.2.6	Running buffer composition	23
2.1.3	Biosensor applications in lipid-induced auto-immunity	24
2.1.4	Mycolic acid lipid antigens in tuberculosis	24
2.1.5	Ganglioside lipid antigens in the Guillain-Barré syndrome	27
2.2	Aims	31
2.3	Materials and Methods	32
2.3.1	Materials	32
2.3.2	Calculations	32
2.3.3	Analytical thin layer chromatography	33
2.3.4	Two-dimensional thin layer chromatography	33
2.3.5	Preparative thin layer chromatography	34
2.3.6	Complex argentation thin layer chromatography	34
2.3.7	Preparation of <i>Mycobacterium tuberculosis</i> mycolic acids	35
2.3.8	Preparation of <i>Mycobacterium avium</i> mycolic acids	35
2.3.9	High pressure liquid chromatography	36
2.3.9.1	Reagents	36

2.3.9.2	Derivatisation of mycolic acids	36
2.3.9.3	Reverse phase HPLC	36
2.3.10	Methylation of mycolic acids.....	37
2.3.11	Thin layer chromatography of methylated mycolic acids.....	37
2.3.12	Electron-impact mass spectrometry	38
2.3.13	Biosensors	39
2.3.14	Mycolic acid-liposome preparation	39
2.3.15	Mycolic acid-liposome immobilisation on biosensor cuvettes	39
2.3.16	Mycolic acid-liposome cuvette regeneration	40
2.3.17	Ganglioside-liposome preparation	40
2.3.18	Ganglioside-liposome immobilisation on biosensor cuvettes.....	41
2.3.19	Ganglioside-liposome cuvette regeneration.....	41
2.4	Results	42
2.4.1	Separation of the mycolic acid subclasses with thin layer chromatography	42
2.4.1.1	Optimisation of detection method	42
2.4.1.2	Thin layer chromatographic comparison of different mycolic acid sources	43
2.4.1.3	High pressure liquid chromatography identification of mycolic acids in thin layer chromatography-separated samples	44
2.4.1.4	Titration of diethyl ether concentration in the mobile phase.....	46
2.4.1.5	Separation of mycolic acids with 80:20 diethyl ether:n-hexane	47
2.4.1.6	Effect of acetic acid in the mobile phase on mycolic acid mobility.....	47
2.4.1.7	Other methods of mycolic acid separation	48
2.4.1.8	Preparative isolation of mycolic acid subgroups	49
2.4.1.9	Electron-impact mass spectrometry	50
2.4.1.10	Separation of methylated mycolic acids.....	52
2.4.1.11	Preparative thin layer chromatography of methylated mycolic acids	54
2.4.2	Lipid antigen immobilisation on biosensor cuvette surfaces	54
2.4.2.1	Exploratory experiments with mycolic acid immobilisation on biosensor cuvette surfaces	54
2.4.2.2	Optimising mycolic acid-liposome concentration.....	57
2.4.2.3	Application of method to ganglioside G _{M1}	59
2.4.2.4	Exploratory use of ganglioside-containing liposomes	59
2.4.2.5	Saponin is redundant when using ganglioside-liposomes	59
2.4.2.6	Regeneration using ethanol/sodium hydroxide/hydrochloric acid.....	61
2.4.2.7	Regeneration using ethanol/potassium hydroxide/hydrochloric acid.....	62
2.4.2.8	Ganglioside concentration optimisation	63
2.4.2.9	Cetyl pyridinium chloride is redundant when using ganglioside-liposomes.....	64
2.5	Discussion	66
2.5.1	The separation of mycolic acid subclasses with thin layer chromatography	66
2.5.2	Immobilisation of lipid antigens on a biosensor cuvette surface	69

Chapter 3: Application of the biosensor to measure anti-ganglioside antibodies in Guillain-Barré syndrome patients

3.1	Introduction	73
3.1.1	The Guillain-Barré syndrome	73
3.1.2	<i>Campylobacter jejuni</i> as antecedent infection	74
3.1.3	Histopathology of Guillain-Barré syndrome	74

3.1.4	Molecular mimicry.....	75
3.1.5	Cholera toxin: A specific probe for ganglioside binding.....	76
3.1.6	Kinetics	79
3.1.7	Association analysis.....	81
3.1.8	Dissociation analysis.....	83
3.2	Hypothesis.....	86
3.3	Aims	86
3.4	Materials and Methods.....	87
3.4.1	Materials	87
3.4.2	Biosensors	87
3.4.3	Sera	87
3.4.4	Modification of running buffer	88
3.4.5	Ganglioside-liposome surfaces	88
3.4.6	Cholera toxin preparation and dilutions	88
3.4.7	Bovine serum albumin preparation and dilutions	88
3.4.8	Interaction analysis	89
3.4.9	FASTfit analysis	89
3.4.10	Statistical analysis.....	89
3.5	Results.....	90
3.5.1	Suitability of cholera toxin as positive control	90
3.5.2	Effect of ganglioside concentration in ganglioside-liposomes on cholera toxin binding kinetics	91
3.5.3	Specificity of cholera toxin for ganglioside G _{M1}	92
3.5.4	Statistical analysis of cholera toxin binding kinetics	93
3.5.5	Exploratory experiments with Guillain-Barré syndrome patient sera	95
3.6	Discussion	98

Chapter 4: Concluding discussion

Concluding discussion	101
Summary	107
Opsomming.....	109
Annexures	111
References.....	115

LIST OF TABLES

Table 2.1	Comparison of the net liposome binding capacities in an IAsys biosensor non-derivatised cuvette.	60
Table 3.1	The frequency of infections noted prior to the onset of the Guillain-Barré syndrome	74
Table 3.2	Diseases associated with molecular mimicry.....	76
Table 3.3	Comparison of K_D values obtained by different laboratories	98

LIST OF FIGURES

Figure 1.1	Diagram of an immunoglobulin structure indicating the location of isotopic, allotypic and idiotypic antigenic determinants.....	3
Figure 1.2	Idiotypes and anti-idiotypes	5
Figure 1.3	Parallel sets.....	7
Figure 1.4	Microbial induction of auto-immunity through idiotypic mechanisms	10
Figure 1.5	Regulation of the B-cells via idiotypic network interactions	11
Figure 2.1	Two configurations of a molecular interaction chamber of a biosensor.....	18
Figure 2.2	Optical pathway of laser light through the IAsys biosensor prism block.....	19
Figure 2.3	An example of the effect of ligand immobilisation level on the rate of association.....	20
Figure 2.4	An example of the effect of stir speed on the apparent on-rate, k_{on}	22
Figure 2.5	Examples of possible resonance scans of the IAsys biosensor cuvette surface.....	23
Figure 2.6	A comparison of bacterial cell barrier structures	25
Figure 2.7	General structure of mycolic acids showing the distinction between the α -, keto- and methoxy- subclasses	26
Figure 2.8	Structures of gangliosides and other glycolipids significant in the Guillain-Barré syndrome and other immune-mediated neuropathies	28
Figure 2.9	Structures of gangliosides and <i>Campylobacter jejuni</i> lipopolysaccharides	29
Figure 2.10	A comparison between the sensitivities of sulphuric acid charring and iodine vapours as visualisation techniques for mycolic acids and cholesterol.....	42
Figure 2.11	A thin layer chromatogram of <i>Mycobacterium avium</i> , <i>M. tuberculosis</i> and commercial mycolic acids from <i>M. tuberculosis</i>	43
Figure 2.12	High-pressure liquid chromatography analysis of <i>M. tuberculosis</i> thin layer chromatography bands	44

Figure 2.13	High-pressure liquid chromatography analysis of <i>Mycobacterium avium</i> thin layer chromatography bands	45
Figure 2.14	The effect of diethyl ether concentration in <i>n</i> -hexane as the eluent on the mobility of cholesterol and <i>Mycobacterium tuberculosis</i> mycolic acids.....	46
Figure 2.15	Comparing the mobilities of different mycolic acid samples on a thin layer chromatography plate with 80:20 diethyl ether: <i>n</i> -hexane as mobile phase	47
Figure 2.16	Thin layer chromatograms to titrate the optimal amount of acetic acid added to 20ml of the mobile phase (20:80 diethyl ether: <i>n</i> -hexane)	48
Figure 2.17	Preparative thin layer chromatography plates developed with 80:20 diethyl ether: <i>n</i> -hexane and visualised by sulphuric acid charring	49
Figure 2.18	Electron-impact mass spectra of thin layer chromatography separated self-prepared <i>Mycobacterium tuberculosis</i> mycolic acids.....	51
Figure 2.19	Separation of methylated self-prepared <i>Mycobacterium tuberculosis</i> mycolic acids	52
Figure 2.20	Separation of different diethyl ether or <i>n</i> -hexane methylated and unmethylated mycolic acid samples with five consecutive developments in 9:1 (v/v) petroleum ether:diethyl ether mobile phase.....	53
Figure 2.21	Preparative thin layer chromatography of methylated self-prepared <i>Mycobacterium tuberculosis</i> mycolic acids and confirmation of purity	54
Figure 2.22	A first IAsys biosensor interaction profile	55
Figure 2.23	The biosensorgram obtained at the laboratories of IAsys Affinity Sensors, Cambridge, U.K.....	56
Figure 2.24	A biosensorgram showing the difference between regeneration with or without ethanol included.....	57
Figure 2.25	A titration of the optimal concentration of mycolic acid-liposomes for immobilisation on a non-derivatised biosensor cuvette	58
Figure 2.26	A biosensorgram to demonstrate reproducible immobilisation of separately prepared aliquots of mycolic acid-liposomes.....	58
Figure 2.27	IAsys biosensorgrams demonstrating that successive wash steps with buffer do not remove an immobilised ganglioside-liposome coat	60

Figure 2.28	A biosensorgram of ganglioside-liposome immobilisation and regeneration with ethanol, NaOH and HCl	61
Figure 2.29	FASTplot overlays of sequential ganglioside-liposome immobilisations and 10mM NaOH washing.....	63
Figure 2.30	FASTplot overlays of ganglioside-liposome immobilisation using three different ganglioside concentrations (5, 10, 20%)	63
Figure 2.31	Effect of cetyl peridinium chloride on the immobilisation of ganglioside-liposomes on IAsys biosensor cuvettes	64
Figure 3.1	Histopathology of the Guillain-Barré syndrome.....	75
Figure 3.2	Members of the AB ₅ family of toxins secreted by various bacteria.....	77
Figure 3.3	Binding of five ganglioside molecules to the pentameric cholera toxin 78	78
Figure 3.4	Theoretical association curves	81
Figure 3.5	Sample plot of k_{on} versus ligate concentration.....	82
Figure 3.6	Theoretical dissociation curves	83
Figure 3.7	Association and dissociation curves of four theoretical molecular interactions	84
Figure 3.8	A FASTplot overlay showing the association and dissociation of different concentrations of cholera toxin.....	90
Figure 3.9	Association of 171nM cholera toxin to different ganglioside concentrations.....	91
Figure 3.10	FASTplot overlays of the association of different bovine serum albumin concentrations and 100nM cholera toxin to a ganglioside-liposome surface.....	92
Figure 3.11	FASTplot overlays of the associations of 200nM cholera toxin or 200nM bovine serum albumin with 5% ganglioside- or pure phosphatidylcholine-liposomes.....	93
Figure 3.12	Representative sensorgram of one data set of cholera toxin binding to 5% ganglioside-liposomes	94
Figure 3.13	Plot of the first order apparent on-rate ($k_{on(1)}$) versus ligate concentration for the binding of cholera toxin to a 5% ganglioside-liposome surface.....	94
Figure 3.14	Binding of 1:50 Tris-buffer-diluted control and patient (F102A) sera to a 5% ganglioside-liposome surface	96

Figure 3.15	Binding of 1:100 Tris-buffer-diluted control and patient sera (F102A) after calibration with 1:1000 Tris-buffer-diluted control serum to a 5% ganglioside-liposome surface.....	97
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Ag	antigen
AgNO ₃	silver nitrate
AIDS	acquired immune deficiency syndrome
anti-Ig	antibody
BCG	Bacillus Calmette Guerin
BIA	BioMolecular Interaction Analysis
CC	cell-cell adhesion
CS-12	chondroitin sulphate
CD	cluster of differentiation
cm	centimeters
CMC	carboxymethyl dextran
CP	carboxyl pyridinium chloride
CSIR	Council for Scientific and Industrial Research
CS	cellulose matrix
CSG	cellulose matrix chromatography
Dv	dynamic viscosity
DNA	deoxyribonucleic acid
D ₅₀	50% inhibitory dose
DM	dimethyl sulfoxide
DMF	dimethyl formamide
DMPC	1,3-bis(sn-3'-phosphatidyl)-sn-glycerol-3
ELISA	enzyme-linked immunosorbent assay
ELISA ²	enzyme-linked immunosorbent assay 2
eV	electronvolt
G	ligand
GAS	Goldstein-Barré syndrome
GLC	gas chromatography
G ₀	ganglioside G ₀
G ₁	ganglioside G ₁
G ₂	ganglioside G ₂
G ₃	ganglioside G ₃
G ₄	ganglioside G ₄
G ₅	ganglioside G ₅
HA	hyaluronic acid
HDL	high-density lipoprotein
HIV	human immunodeficiency virus
HPLC	high-pressure liquid chromatography
HSP	heat shock protein
IAsys	interaction analysis system
Ig	isotype

LIST OF ABBREVIATIONS

Å	Angstrom
Ab	antibody
Ag	antigen
AgNO ₃	silver nitrate
AIDS	acquired immune deficiency syndrome
anti-Id	anti-idiotypic
BCG	Bacillus Calmette Guerin
BIA	biomolecular interaction analysis
°C	degrees Celsius
CaSO ₄	calcium sulphate
CD	cluster of differentiation
cm	centimeters
CMD	carboxymethyl dextran
CPC	cetyl pyridinium chloride
CSIR	Council for Scientific and Industrial Research
CTx	cholera toxin
CTxB	cholera toxin B-subunit (cholera toxin B-subunit)
Da	Dalton
DHB	2,5-dihydroxybenzoic acid
DNA	deoxyribonucleic acid
EDC	1-ethyl-3-(3-dimethylaminopropyl)-carbodiimide
EDTA	ethylene diamine tetra-acetic acid
EI-MS	electron-impact mass spectrometry
ELISA	enzyme-linked immunosorbent assay
eV	electronvolt
G	ligand
GBS	Guillain-Barré syndrome
GC-MS	gas chromatography mass spectrometry
G _{D1a}	ganglioside G _{D1a}
G _{D1b}	ganglioside G _{D1b}
G _{M1}	ganglioside G _{M1}
G _{M3}	ganglioside G _{M3}
GSCN	guanidine thiocyanate
HCl	hydrochloric acid
HDL	high-density lipoproteins
HIV	human immune deficiency virus
HPLC	high-pressure liquid chromatography
HSP	heat shock protein
IASys	interaction analysis system
Id	idiotype

Ig	immunoglobulin
ITC	isothermal titration calorimetry
IVIg	intravenous immunoglobulin
K_A	association equilibrium constant
k_{ass}	association rate constant
K_D	dissociation equilibrium constant
k_{diss}	dissociation rate constant
KHCO₃	potassium bicarbonate
KOH	potassium hydroxide
k_{on}	apparent on-rate for monophasic association
k_{on(1)}	first order apparent on-rate for biphasic association
k_{on(2)}	second order apparent on-rate for biphasic association
kV	kilovolt
L	ligate
LAM	lipoarabinomannan
LDL	low density lipoproteins
L_{M1}	ganglioside L _{M1}
LPS	lipopolysaccharides
M	molar
MA	mycolic acids
mA	milliamperes
MALDI-TOF	matrix-assisted laser desorption/ionisation time-of-flight
mg	milligrams
MHC	major histocompatibility complex
min	minutes
mM	millimolar
mm	millimeters
MS	mass spectrometry
NaCl	sodium chloride
NaN₃	sodium azide
NaOH	sodium hydroxide
NHS	N-hydroxysuccinimide
nm	nanometers
ODM	octadecylmercaptan
%	percentage
PBS	phosphate buffered saline
PBS/AE	phosphate buffered saline containing sodium azide and EDTA
PC	L- α -phosphatidylcholine
PLC	preparative thin layer chromatography
PPD	purified protein derivative
psi	pounds per square inch
R₀	initial biosensor response
R_{eq}	equilibrium biosensor response
R_t	biosensor response at time t

SLE	systemic lupus erythematosus
std	standard
TB	tuberculosis
T_C cells	cytotoxic T-cells
TCR	T-cell antigen receptor
TFA	trifluoroacetic acid
T_H cells	T helper cells
TLC	thin layer chromatography
TMDM	(trimethylsilyl)diazomethane
Tris	tris (hydroxymethyl) aminomethane
T_S cells	suppressor T cells
µg	micrograms
µl	microliters
UV	ultra violet
V	volt
v/v	volume per volume
w/v	weight per volume