

P R E F A C E

The research activities of the Tuberculosis Research Centre continue to support national and global efforts to control TB and HIV-TB. Ongoing clinical trials aim to shorten the duration of chemotherapy to periods less than six months, and developing appropriate regimens for the management of MDR-TB. In the field of HIV-TB, clinical trials are focused on improving existing approaches to treatment and prevention of dual infections. Social and behavioural studies seek to identify barriers to access of diagnosis and treatment, and also newer interventions to improve compliance. The laboratory activities described in this Report encompass studies designed to either improve diagnosis or understand the immunogenetics and molecular biology of TB and HIV-TB.

This edition of the Annual Report provides you a glimpse of the research activities of the Centre. They represent the efforts of a large team of scientists, technical and administrative staff during the year. All efforts have been taken to provide the highlights of the research activities in a compact manner. Contact persons named in the Report will gladly provide more details should you need them.

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Distinguished Visitors

Date visited	Name	Organization/place	Remarks
10.05.07	Dr.Andrews Kostler	Tibotec	"Impressive scientific knowledge and equally impressive operational/logistic setting"
10.05.07	Dr.Tine De Mauz	Tibotec	"Impressed with long time TB experience and clinical trial experience and hoping for future collaborations"
10.05.07	Mr.Santhosh Shevade,GCO	Johnson and Johnson, India	"Looking forward to a continued interaction and continuing support"
27.07.07	Case Gordon	TB Activist, France	"Thank you very much for sharing your research agenda"
27.07.07	Dr. Thomas Mampilly	National Institute of Health, USA	"Very impressive! Thank you for taking the time/effort to show me around"
25.01.08	Euken Baneva	Development Agency, Basque country	"Very impressive work. Wish you all success"
25.01.08	Igor Irigoyon	Director of Co-operation, Basque country	"Thank you for your warm welcome and above all for your work"
25.01.08	Olga Pedrova	Development Agency, Basque country	"Congratulations for the really good team work. Thanks for everything"
25.01.08	Ana Gartalot	Development Agency, Basque country	"Hoping that one day all TRC efforts and work will be compensated and we could celebrate that AIDS is a part of the past"

ABBREVIATIONS

3TC	Lamivudine
AFB	Acid fast bacilli
ANN	Artificial neural network
ART	Antiretroviral therapy
ARV	Antiretroviral
ASOP	Allele specific oligonucleotide probes
ATT	Anti-TB treatment
BCG	Bacillus Calmette Guerin
BMI	Body mass index
CFA	Culture filtrate antigen
CFP-10	Culture filtrate protein-10
CPC	Cetyl pyridinium chloride
CS	Chest symptomatic
DC	Dendritic cells
d4T	Stavudine
DOTS	Directly observed treatment short-course
DNA	Deoxyribonucleic acid
DRM	Drug resistance mutation
DST	Drug susceptibility testing
DSMB	Data safety and monitoring board
EDP	Electronic data processing
EFV	Efavirenz
ELISA	Enzyme linked immunosorbent assay
EMB	Ethambutol
EMSA	Electrophoretic mobility shift assay
Env	Envelope
ESAT	Early secreted antigenic target
EQA	External quality assurance
FDA-EB	Fluorescein diacetate-ethidium bromide
FDC	Fixed dose combination
FGD	Focus group discussion
GM-CSF	Granulocyte macrophage colony stimulating factor
HAART	Highly active antiretroviral therapy
HHC	Healthy household contacts
HIV	Human immunodeficiency virus
HLA	Human Leucocyte Antigen
HPLC	High performance liquid chromatography
HTH	Helix turn helix
IcIR	Isocitrate lyase regulatory protein
IGRA	Interferon gamma releasing assay
INH	Isoniazid
IRL	Intermediate reference laboratory
LJ	Lowenstein-Jensen
LPS	Lipopolysaccharide
LRP	Luciferase reporter phage
MAPK	Mitogen activated protein kinase
MERK	Mitogen activated protein kinase.erk
MFX	Moxifloxacin

MDR	Multi drug resistance
MLH	Mothers living with HIV-AIDS
MoDC	Monocyte derived dendritic cell
MSM	Men having sex with men
NACO	National AIDS Control Organization
NHS	Normal healthy subjects
NK	Natural killer
NRL-OSE	National reference laboratory-onsite evaluation
NRTI	Nucleoside reverse transcriptase inhibitor
NNRTI	Non-NRTI
NVP	Nevirapine
OFX	Ofloxacin
ORFs	Open reading frames
PAGE	Sodium dodecyl sulphate
PBMC	Peripheral blood mononuclear cell
PCR-ASP	Polymerase chain reaction – allele specific primer
PCR-RFLP	Polymerase chain reaction – Restriction fragment length polymorphism
PF	Pleural fluid
PLHA	People living with HIV-AIDS
PHC	Primary health centre
PMA	Phorbol myristate acetate
Prot	Protease
PZA	Pyrazinamide
PZAase	Pyrazinamidase
QFT-G	Quantiferon TB gold kit
RNA	Ribonucleic acid
RBRC	Random blinded checking
RMP	Rifampicin
RNTCP	Revised National TB Control Programme
RT	Reverse transcriptase
SDS	Sodium dodecyl sulphate
SRP	Signal recognition particle
STPK	Serine/threonine protein kinase
TB	Tuberculosis
TEM	Transmission electron microscopy
TMP	Tape measure protein
TR	Transcriptional regulators
TSS	Transcriptional start site
TST	Tuberculin skin testing
UTR	Untranslated region
VDR	Vitamin D receptor
XDR-TB	Extensively drug-resistant TB