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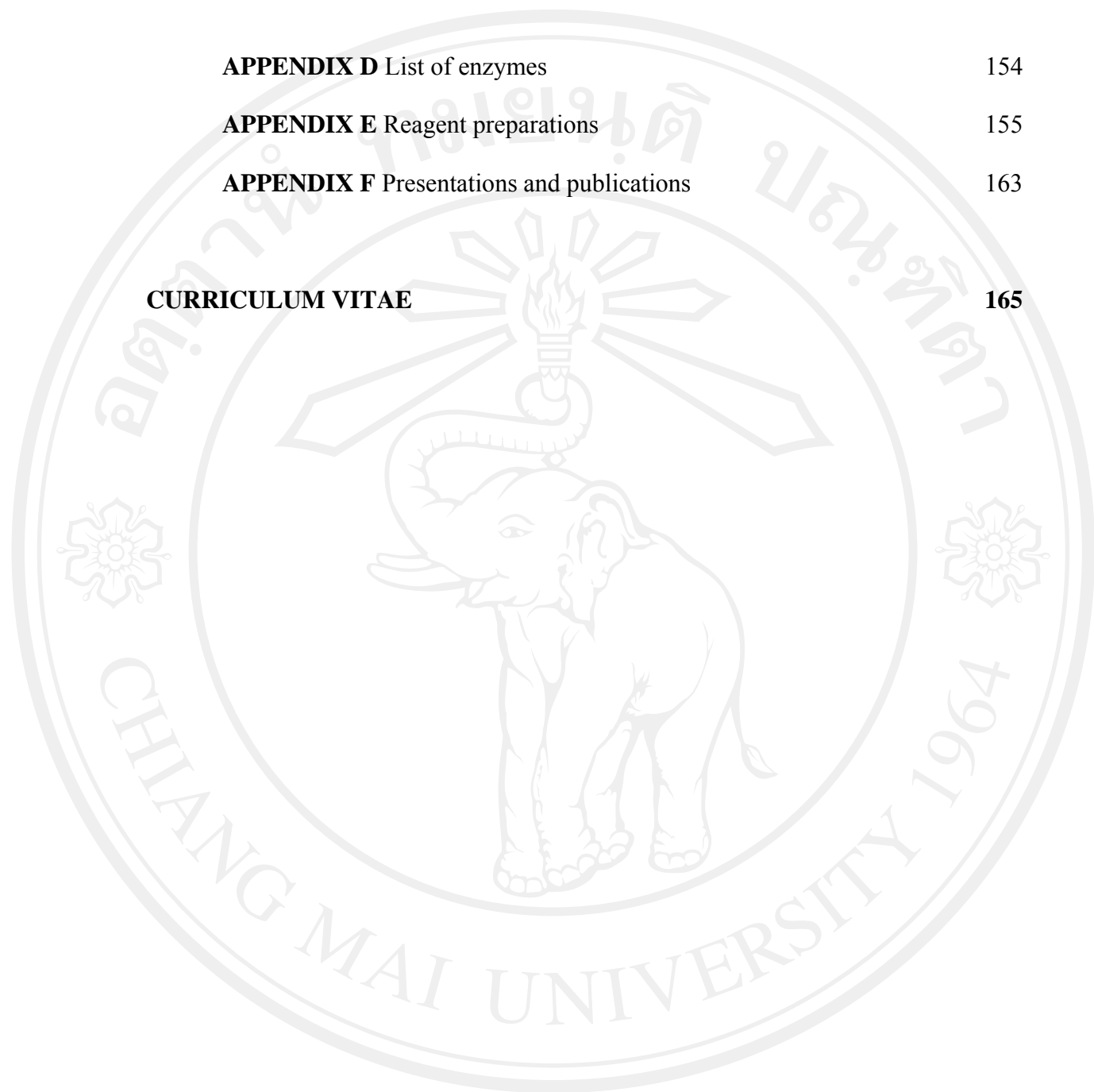
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ABBREVIATIONS AND SYMBOLS

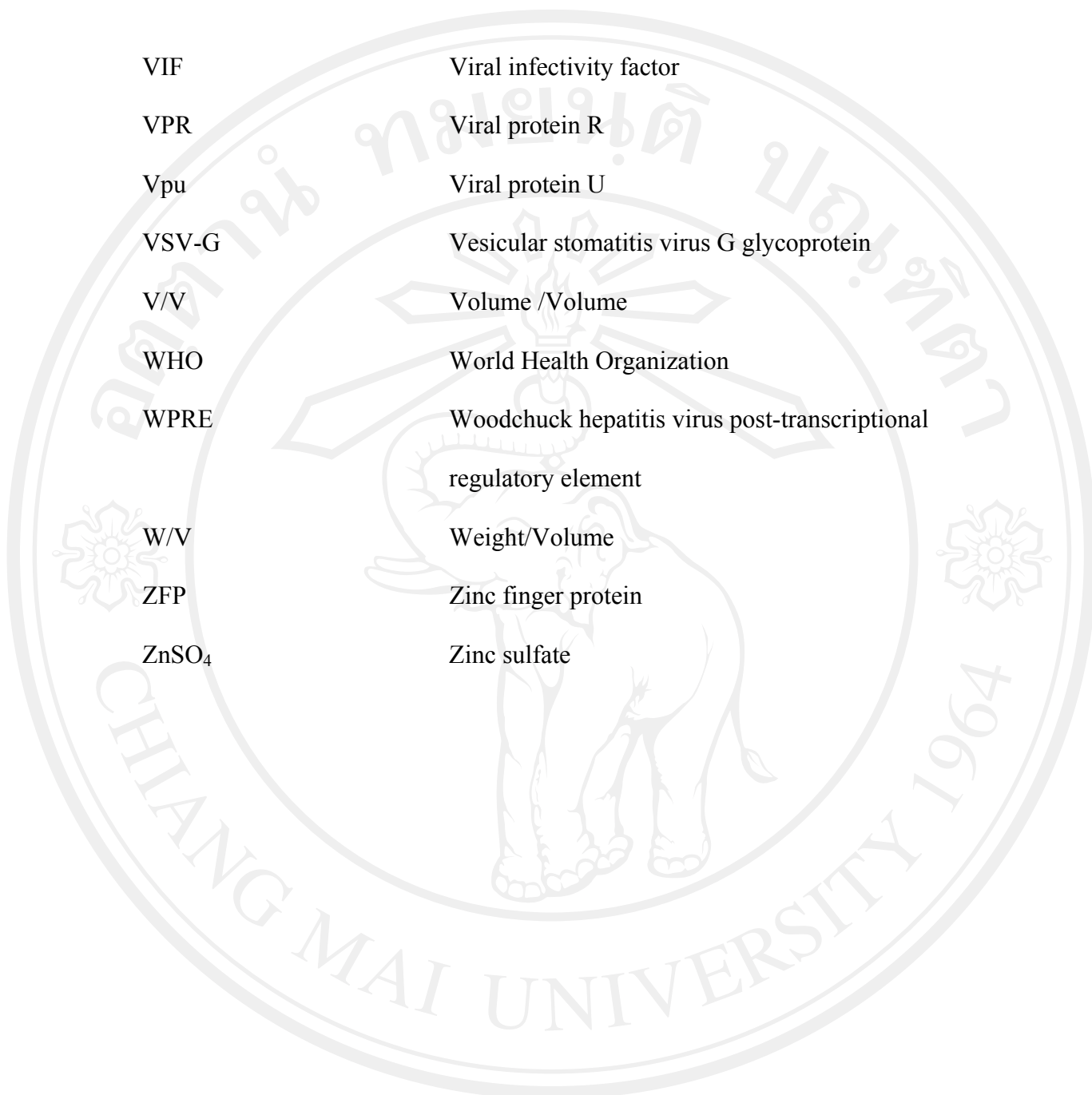
%	Percent
α	Alpha
β	Beta
Ψ	Psi-sequences
$^{\circ}\text{C}$	Degrees Celsius
AIDS	Acquired immunodeficiency syndrome
<i>Alu</i>	<i>Arthrobacter luteus</i>
BBQ	BlackBerry Quencher
bp	Base pair (s)
BSA	Bovine serum albumin
CA	Capsid protein
CCR5	C-C chemokine receptor type 5
CD4	Cluster of differentiation 4
cDNA	Complementary DNA
CMV	Cytomegalovirus
cPPT	Central polypurine tract
C_t	Cycle thresholds
CXCR4	C-X-C chemokine receptor type 4
Cys	Cysteine
DAPI	4',6-diamidino-2-phenylindole
DMEM	Dulbecco's Modified Eagle's medium

DNA	Deoxyribonucleic acid
ds-DNA	Double-stranded DNA
DTT	Dithiothreitol
EBV	Epstein-Barr virus
<i>E. coli</i>	<i>Escherichia coli</i>
EIA	Enzyme immunoassay
ELISA	Enzyme-linked immunosorbent assay
EMSA	Electrophoretic mobility shift assay
ECL	Enhanced Chemiluminescence
ENV	Envelope
ERD	ERF repressor domain
FAM	6-carboxyfluorescein
FBS	Fetal bovine serum
FP	Fusion protein
GAPDH	Glyceraldehyde 3-phosphate dehydrogenase
GAG	Group specific antigens
GFP	Green fluorescent protein
gm	Gram (s)
HAART	Highly active antiretroviral therapy
HEPES	4-(2-hydroxyethyl)-1-piperazineethanesulfonic acid
hr	Hour (s)
HIV	Human Immunodeficiency virus-1
His	Histidine
HCl	Hydrochloric acid

HRP	Horseradish peroxidase
HSCs	Hematopoietic stem cells
IN	Integrase
IPTG	Isopropyl β -D-thiogalactopyranoside (IPTG)
kb	Kilo base pair (s)
KCl	Potassium chloride
Kd	Dissociation constant
kDa	Kilodaltons
KRAB	Kruppel associated box
LB	Luria-Bertani
Leu	Leucine
LTR	Long terminal repeat
M	Molar (s)
MA	Matrix protein
mAb	Monoclonal antibody (-ies)
MFI	Mean fluorescence intensity
MHC	Major histocompatibility complex
MgCl ₂	Magnesium Chloride
min	Minute (s)
ml	Milliliter (s)
MOI	Multiplicity of infection
mPGK	Murine phosphoglycerate kinase
Mw	Molecular weight
NaCl	Sodium chloride

NaN ₃	Sodium azide
NaOH	Sodium hydroxide
NC	Nucleocapsid protein
NEF	Negative Regulatory Factor
ng	Nanogram (s)
NLS	Nuclear localization signal
NNRTIs	Non-nucleoside reverse transcriptase inhibitors
nm	Nanometer (s)
nM	Nanomolar (s)
NRTIs	Nucleoside/nucleotide reverse transcriptase inhibitors
OD	Optical density
OriP	Origin of replication
PBS	Phosphate buffered saline
PBS	Primer binding site
PCR	Polymerase chain reaction
Phe	Phenylalanine
pI	Isoelectric point
PICs	Preintegration complexes
PMSF	Phenylmethylsulfonylfluoride
POL	Polymerase
PPT	Polypurine tract
PRIs	Protease inhibitors
qPCR	Quantitative polymerase chain reaction
RCL	Replication competent lentiviruses

RFP	Red fluorescent protein
RNA	Ribonucleic acid
rpm	Revolutions per minute
RRE	Rev-responsive element
RT	Reverse transcriptase
S	Second (s)
scFv	Single-chain variable fragments
SD	Standard deviation
SDS-PAGE	Sodium dodecyl sulfate polyacrylamide gel electrophoresis
SIN	Self-inactivating
siRNAs	Small interfering RNAs
shRNAs	Short hairpin RNAs
SPR	Surface plasmon resonance
ss-DNA	Single-stranded DNA
TAT	Transactivator of transcription
TBP	TATA-box binding protein
TSO	Target site overlap
Tyr	Tyrosine
μg	Microgram (s)
μl	Microliter (s)
μm	Micrometer (s)
μM	Micromolar (s)
V	Volt (s)



VIF	Viral infectivity factor
VPR	Viral protein R
Vpu	Viral protein U
VSV-G	Vesicular stomatitis virus G glycoprotein
V/V	Volume /Volume
WHO	World Health Organization
WPRE	Woodchuck hepatitis virus post-transcriptional regulatory element
W/V	Weight/Volume
ZFP	Zinc finger protein
ZnSO ₄	Zinc sulfate

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