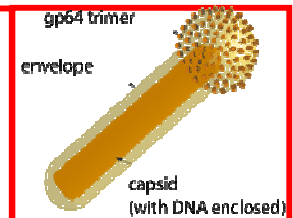
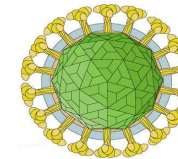
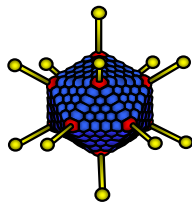




Viral Vector systems

- Introduction of foreign DNA segments into living cells:

Viral Vector systems supported by the Vector Facility



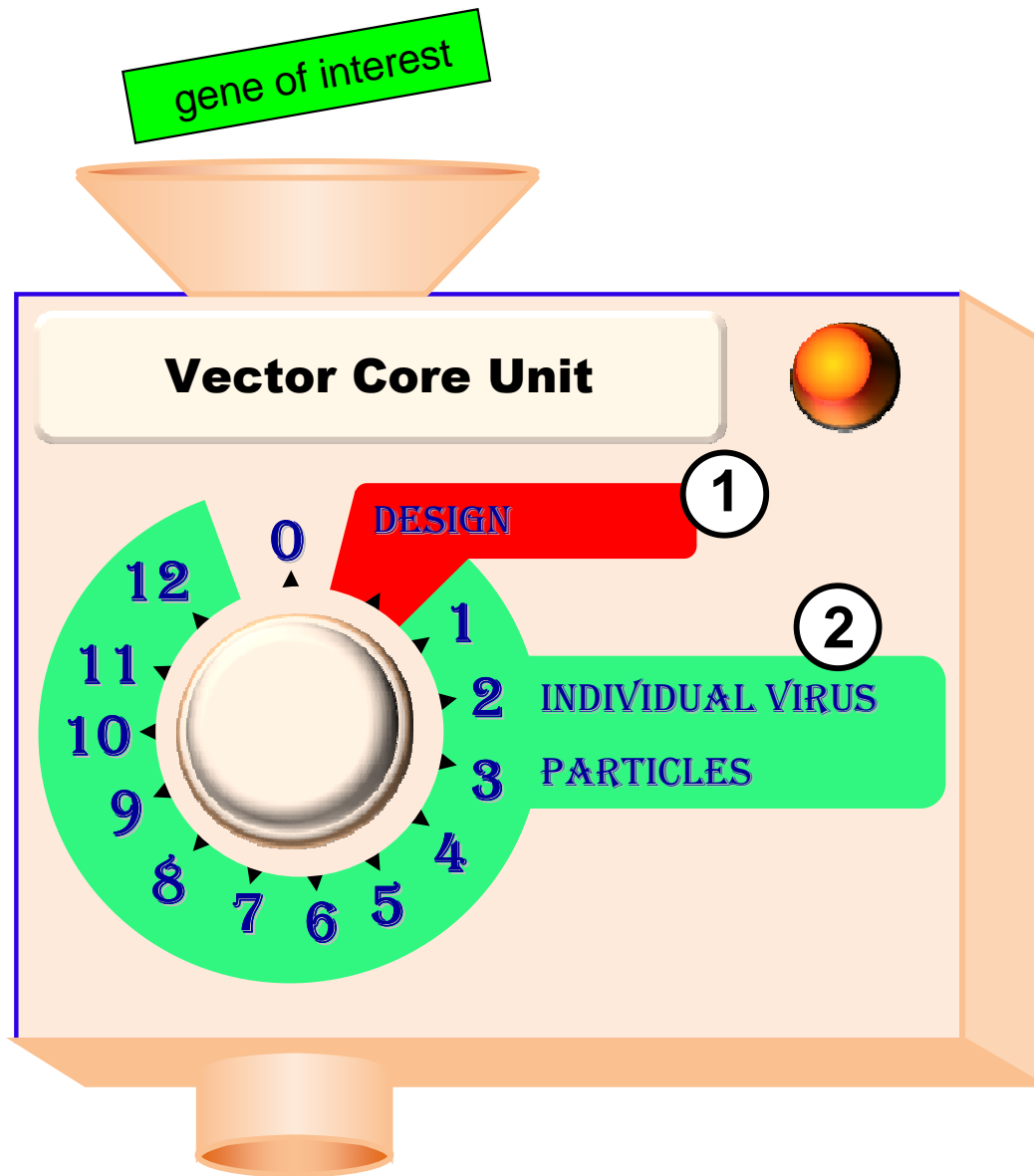
	Adenovirus 5	Adeno-associated Virus	γ-Retrovirus	Lentivirus (VSV-G)	Semliki Forest Virus	Baculovirus
Cloning capacity (kb)	8-10	2.5 / 4.5	8	9	5	??
Size (nm)	70-100	20	80-100	80-100	50-70	40 x 300
Chromosomal Integration	no	no	yes	yes	no	no
Yield (Units/ml)	high	high	medium	medium	medium	medium
Transgene Expression	weeks to months	years	long	long	hours to days	days
Infection of quiescent cells	yes	yes	no	yes	yes	yes
Tissue Tropism	yes	yes	low	no	low	yes
Cytopathic effect	yes	no	no	no	yes	(no)

S1

S1

S1

S1



- Viral Vector Production
 - choose gene transfer vehicle
 - choose (heterologous) promoter
 - produce transgene plasmid
 - choose purification method
 - choose quantification method
- Selected virus stocks expressing control genes (GFP, Luciferase) available at the Vector Core Unit