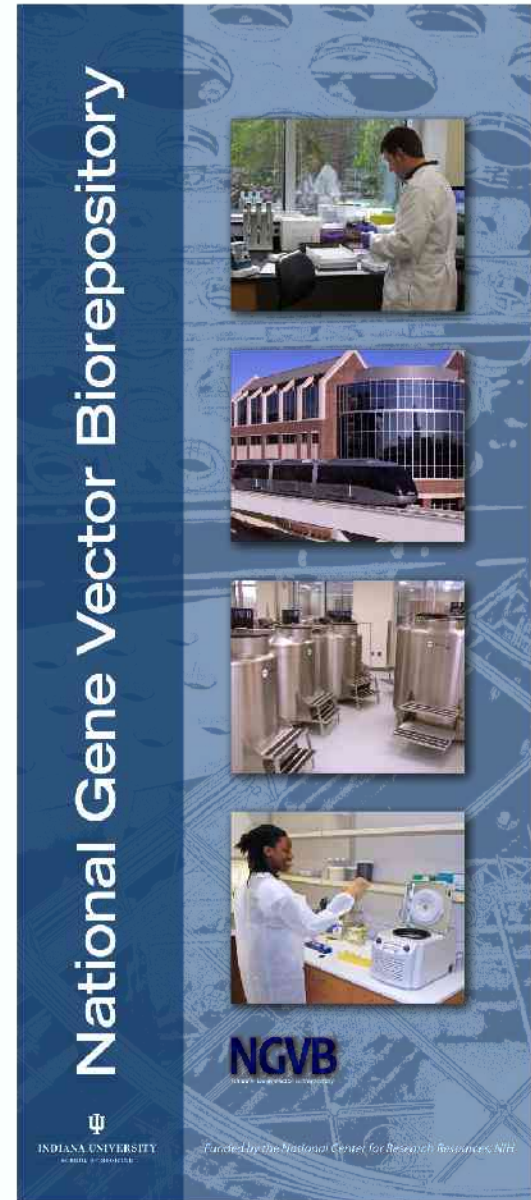


National Gene Vector Biorepository

a NCRR funded gene therapy resource

Kenneth Cornetta, M.D.
Indiana University School of Medicine



The banner features a vertical title on the left: "National Gene Vector Biorepository". To the right, four images are stacked vertically: a scientist in a lab coat working at a bench, a modern building with a large glass facade, a clean laboratory with stainless steel tanks, and a scientist working with a centrifuge. At the bottom left is the Indiana University logo and "INDIANA UNIVERSITY SCHOOL OF MEDICINE". At the bottom right is the "NGVB" logo and the text "Funded by the National Center for Research Resources, NIH".

Disclosure

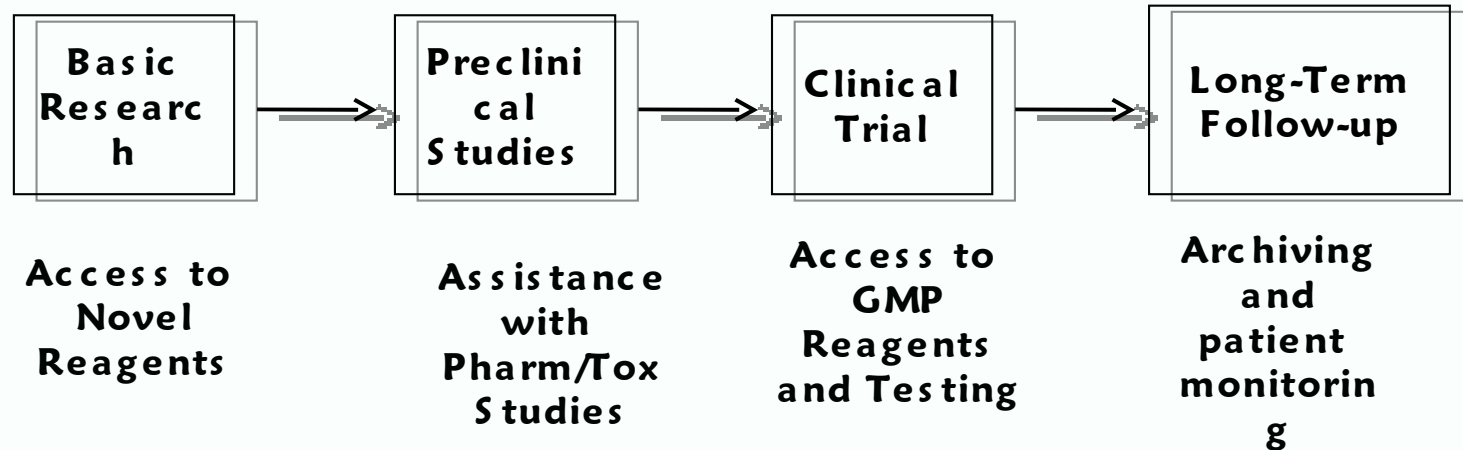
- Founder of Rimedion, Inc.

Topics



- Rationale for a NGVB
- Available resources
- How to access
- Cost

Drug development in a research environment



- NIH study sections do not see development as research
- FDA regulations are inadequate for gene therapy

Reagent Repository

- ▣ AAV vector plasmids (courtesy of Jude Samulski)
- ▣ Adenoviral vector stocks (Lowenstein/Castro)
- ▣ Retroviral vectors
- ▣ Retroviral and lentiviral packaging line (J. Gray)
- ▣ Certified Cell Lines
 - ▣ HEK293
 - ▣ HEK293T
 - ▣ Phoenix cell lines
 - ▣ PG13
 - ▣ G7b-1

Reagent Repository

All	Reagent Type ▾	Vector Classification ▾
	Antibody ▶	All
	Cell Line ▶	AAV
	Plasmid ▶	Adenovirus
	Vector ▶	HSV
		Lentivirus
		Retrovirus

To order
pull-down

Example

- Select **Reagent Type**
- Select **Reagent Type**
- Select **Reagent Type**

to see from the
cart.

AV to see all AAV
e all cell lines

To continue to shop for reagents hit the reagents button at the top. To checkout hit the cart button to finalize your order.

Archiving Services

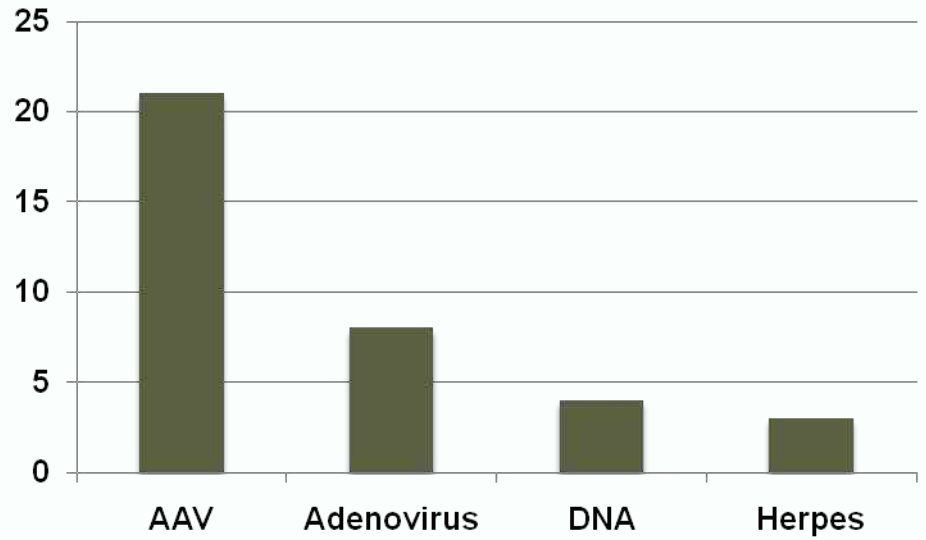
- ❑ Over 10,000 samples from GLP Pharm/Tox studies
- ❑ Back-up of GMP grade vectors and cell lines
- ❑ Archive patient samples to comply with FDA requirements for post-trial monitoring



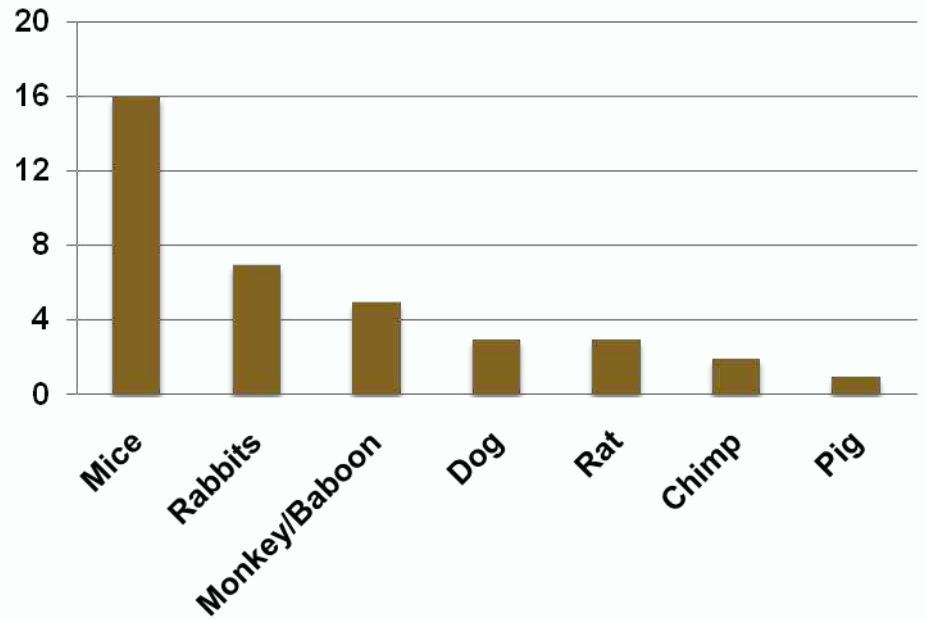
Pharm/Tox Database

- ▣ Detailed description of Pharm/Tox studies submitted to the FDA in support of gene therapy INDs
- ▣ GLP and non-GLP studies eligible
- ▣ Foster letters of cross-reference
- ▣ Educational tool

Studies by Vector



Studies by Species



Log in to site

username:

password:

[Members Login](#)

[Home](#) > [Toxicology Database](#) > [Toxicology Reports](#)

Toxicology Reports

Welcome to the Toxicology database. This area holds a summary of Toxicology studies that have been submitted to our database.

The information contained here is for public view. You may search for a study by selecting an option on the right. If you wish to see details of the data or share your own data then you would need to obtain a user account and log-in [click here](#). Once you have acquired your user name and password you can then enter your own study into the database by choosing "Submit a New Report, or you can view reports that you have already entered by choosing "View Your Reports". You can also view a detailed version of all the studies entered by selecting the search options.

Investigators wishing to obtain a letter of cross-reference from the Principal Investigator of a particular study may do so by emailing

Search for Reports by:

Vector System:

Select a vector system...

Animal Species:

Select a species...

Vector Grade:

Select a grade...

Clinical Indication:

Select an indication...

Route of Administration

Select a route...

[Search Reports](#)

[Clinical Trial Publications Associated with Database Toxicology Studies](#)

[Toxicology Database User Guide](#)

Reports

Reports by:

...

ation

ications Database is

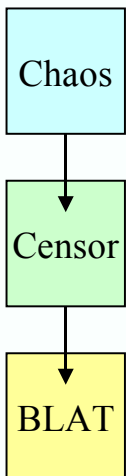
ase User

Post-Trial Monitoring

- ▣ RCR and RCL testing
- ▣ LAM-PCR or other insertion site analysis
- ▣ SeqMap 2.0

SeqMap

Submitted sequences are represented graphically



Each sequence is mapped to the genome, using the following three-step protocol:

DNA sequences are displayed, colored to match the graphical representation to aid in distinguishing its sections

original

vector

chr3

Proposed Insertion Site

TDPB_Start

LTR_AdaptorPrimer

LTR1

TDPB_End

Description (Edit Description)
SEQ03-1.2

Sample (Edit Sample)
SEQ03-1

Comment (Edit Comment)

BLAT Annotation (Full Summary)
Hits Found: 2

User Data
Add User Data

Calculation of Top UCSC Hit

Gene Symbol:	Evi1
Gene Location:	upstream
Identity:	100.0
Strand:	-
Closest End (kbp):	109.4
Gene ID:	NM_007963
Human Ortholog:	EVI1

Calculation of Top Ensembl Hit

Gene Symbol:	Evi1
Gene Location:	intron 1
Identity:	100.0
Strand:	-
Closest End (kbp):	443.4
Gene ID:	NM_007963.1
Human Ortholog:	EVI1

Sequence

Original Sequence

```

GCTTGGTDCGAGTDCSRATDCACTAGTAACGGGGGCCAGGGTGCGGGAATTCGGGCTTCCATPNCCTGCA
AAAGGFLDTTACTCCAGCTACGTTCCGCAACCTACAGCTGGGGTCTTTCACTACTCTTATCAACTGAGAT
AACGAGAATCATTTTCTATATTTCCAGGGCCAGGGCCCCACAGTGAAGTGTTAGAAGCCCTGGTCTTCT
CCAGAGAATCACACAGCGTGCNTAAGANGGGGCAATTCCTGTCGAGATTTCCNCAATCCACACTGGGGGG
CGTCTCGAGCATGCATCTAAGGGGCCAATTCGGCCCTACTACTGACTGCTATTAGCAULTCAATGGGCT
CMTTNTACACNNTCTTGACNGGAAAAAAA
  
```

Vector Removed Sequence

```

GCTTGGNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
AACGAGAATCATTTTCTATATTTCCAGGGCCAGGGCCCCACAGTGAAGTGTTAGAAGCCCTGGTCTTCT
CCAGAGAATCACACAGCGTGCNTAAGANGGGGCAATTCCTGTCGAGATTTCCNCAATCCACACTGGGGGG
CGTCTCGAGCATGCATCTAAGGGGCCAATTCGGCCCTACTACTGACTGCTATTAGCAULTCAATGGGCT
CMTTNTACACNNTCTTGACNGGAAAAAAA
  
```

Repeat Masked Sequence

```

DCTTGGNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN
AACGAGAATCATTTTCTATATTTCCAGGGCCAGGGCCCCACAGTGAAGTGTTAGAAGCCCTGGTCTTCT
CCAGAGAATCACACAGCGTGCNTAAGANGGGGCAATTCCTGTCGAGATTTCCNCAATCCACACTGGGGGG
CGTCTCGAGCATGCATCTAAGGGGCCAATTCGGCCCTACTACTGACTGCTATTAGCAULTCAATGGGCT
CMTTNTACACNNTCTTGACNGGAAAAAAA
  
```

How to access

- www.ngvbcc.org
- Register
- Shop





[About/Contact/Search](#)

- ▶ [Information](#)
- ▶ [Archiving Services](#)
- ▶ [Insertion Site Analysis](#)
- ▶ [Pharm/Tox Resources](#)
- ▶ [Clinical Trial Testing](#)
- ▶ [Reagent Repository](#)
- ▶ [Educational Resources](#)
- ▶ [My NGVB](#)

Welcome to the NGVB

The **National Gene Vector Biorepository** (NGVB) is a resource for academic investigators and others conducting gene therapy research. The NGVB Coordinating Center (www.ngvbcc.org) is located in the Department of Medical and Molecular Genetics at the Indiana University School of Medicine. It is made possible through a grant from the National Center for Research Resources, National Institutes of Health.

Efforts in the NGVB are focused in four areas: Archiving Services; Insertional Site Analysis, Pharmacology and Toxicology Resources, and a Reagent Repository.

The databases and educational resources are open to everyone. Other services are limited to gene therapy investigators working in academic or other non-profit organizations. Please click on [About the NGVB](#) to see if you are eligible. Click on the boxes on your right to find out more about the available resources.

Archiving Services

Click [here](#) to learn about services for clinical, toxicology, and other samples.

Insertion Site Analysis

Click [here](#) to learn about the SeqMap bioinformatics tool and get help with vector insertion analysis.

Pharm/Tox Resources

Click [here](#) to visit the NGVB Pharm/Tox database or the NGVB Pharm/Tox Tutorial.

Reagent Repository

Click [here](#) to visit the NGVB Reagent Repository.

LOG IN

user name:

password:

[Get user name and password](#)
[Can't remember your password?](#)

To log in to the Pharm/Tox database [click here](#)

Reagent Request Form

Reagent Information

Name	Type
HEK293T	Cell Line
pCSICW	Plasmid

Requesting Investigator Information

Name:

Institution:

Address:

e-mail:

phone:

1. FedEx Account #:
(for shipping charges)

2. List any NIH or other extramural support for the study (or "none"):

receive

and

public

[8](#)

[3 Policy](#)

ibility.

the [NGVB](#)

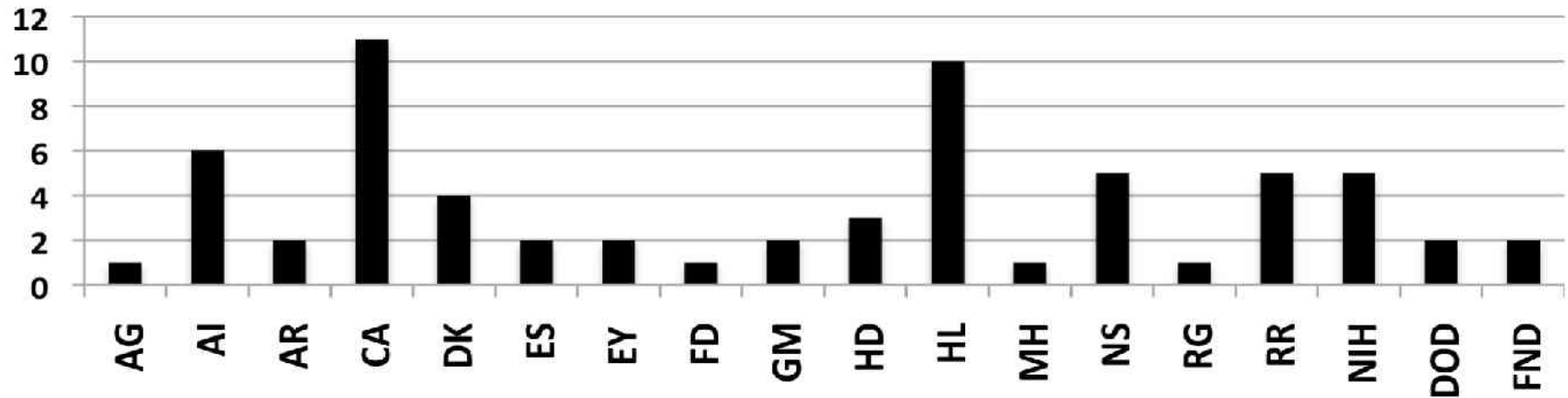
e sent

e

Cost

Resource	Cost
Reagents	FREE to academic investigators
Pharm/Tox Database Info	FREE to all
Archiving Services	FREE to academic US investigators
SeqMap	FREE to all
Insertion Site (ex. LAM-PCR)	FREE to academic investigators
RCR/RCL Testing Post-Trial Monitoring	FREE to academic investigators

NGVB Supports 65 Grants Across Many NIH Institutes



www.NGVBC.org



West Valley JACL
Next Generation Volleyball League

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Volleyball League
Tournaments
Gallery
Links
Contact Us

Summer League

The summer league has come upon us! After a short break, the new season comes with many new faces and new teams. Welcome to the new players!

Download the [2008 Summer League Schedule](#).



Congratulations to our
league champs!

A Pool: Team 3, Captain Mao Wang



A Pool
League champs

IUVPF

INDIANA UNIVERSITY VECTOR PRODUCTION FACILITY



Lorraine Matheson
Troy Hawkins, PhD
Aparna Jasti
Lisa Duffy
Lilith Reeves
Erol Cetinok



Daniela Bischof, PhD
Sue Koop
Jing Yao
Lina Sego
Mikhaila Douglas
Alisha Auberry
Aaron Ernstberger
Anna Leath
Sunyong Tang
Aaron Shaw



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NHLBI, HHSN26820074820)
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NCI N02-RC-67002 and PO1 HL53586
(Dinauer
Lilly Endowment: Indiana Genomics Initiative