

NIH Office of Biotechnology Activities and IBCs: Promoting Synergy in Oversight



IBCs and OBA

- **IBCs and OBA are key components in a matrix of rDNA oversight, biosafety surveillance, and human subjects protections.**

Oversight for Basic rDNA Research

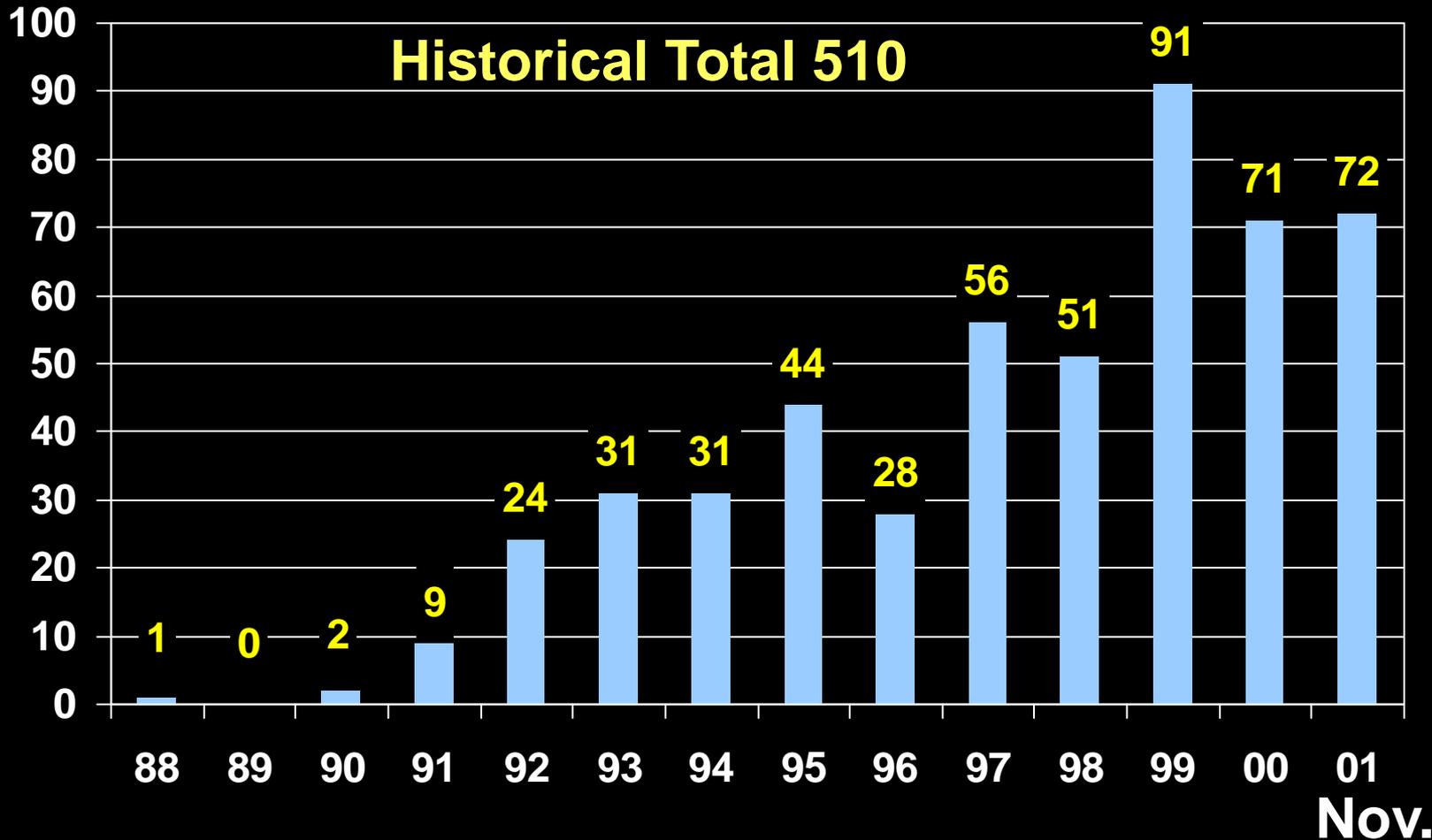
"Coordinated Framework"

FEDERAL		LOCAL
Regulatory Policies	Research policies	
USDA	NIH	Institution
FDA	NSF	IBC
EPA	EPA	Investigator
OSHA	OSHA	

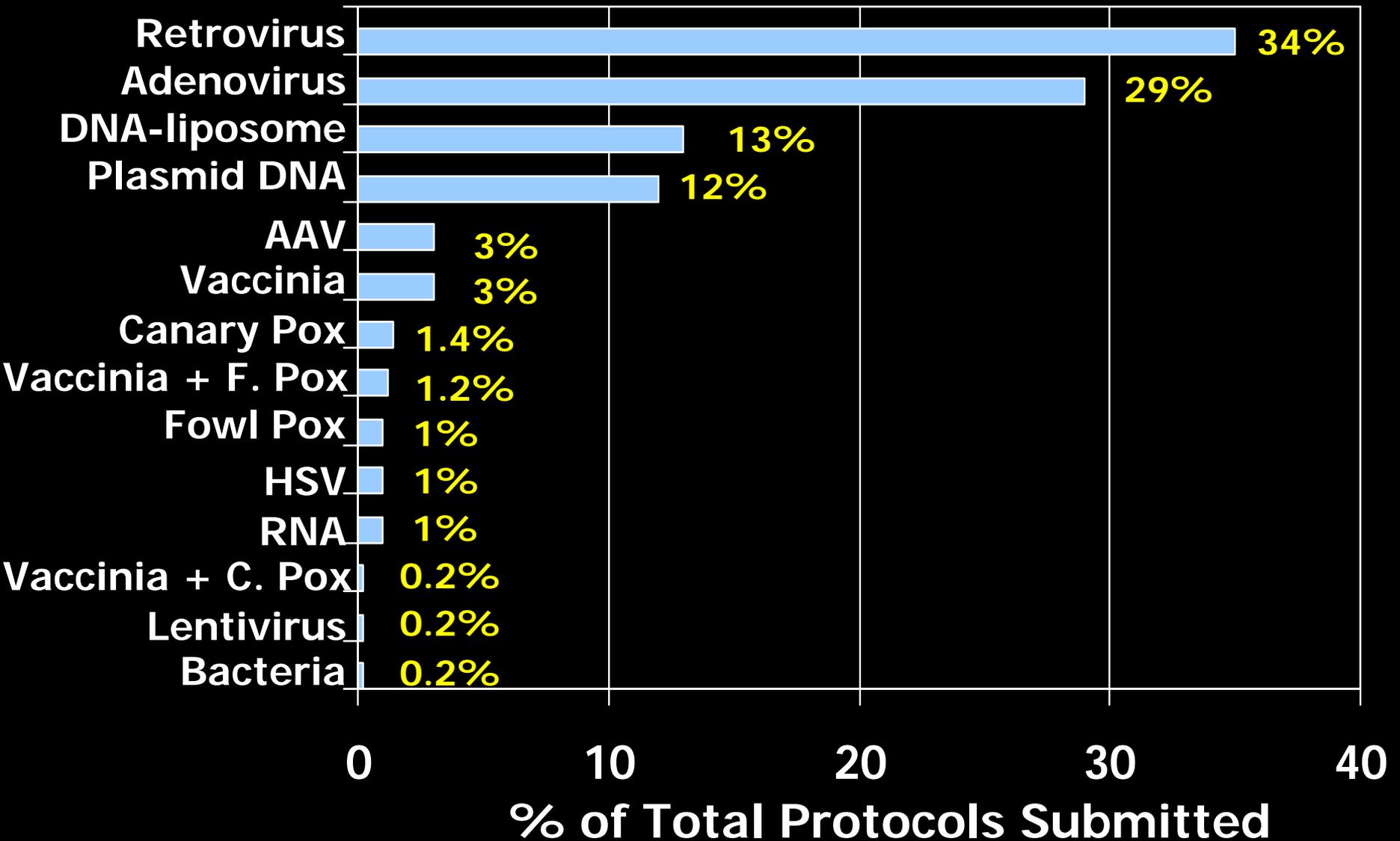
Oversight for Human Gene Transfer Research

FEDERAL	LOCAL
OHRP	Institution
FDA	IRB
NIH	IBC
	Investigator

Gene Transfer Trials by Year



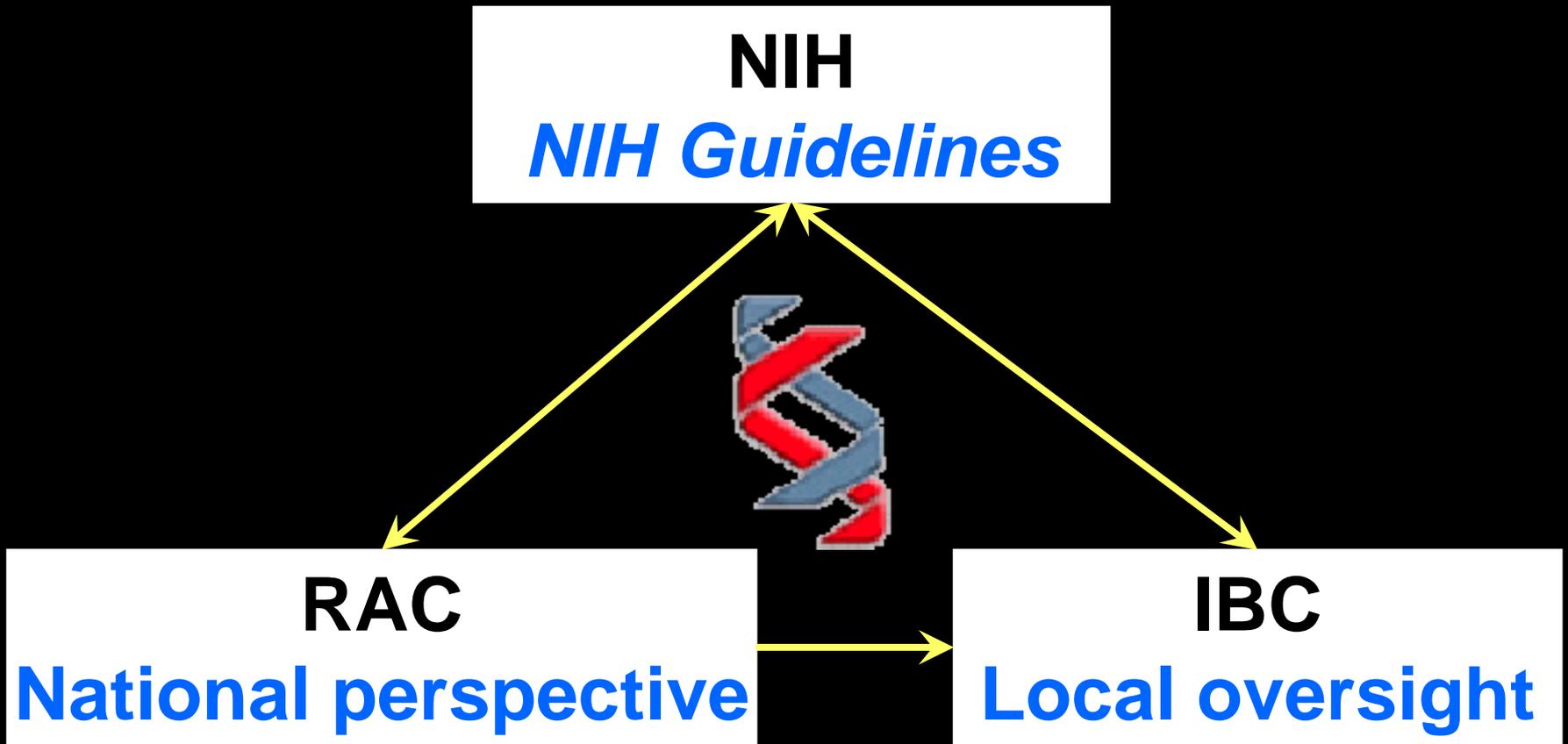
Gene Transfer Trials By Delivery System



IBCs and OBA

- **IBCs and OBA are key components in a matrix of rDNA oversight, biosafety surveillance, and human subjects protections.**
- **IBCs are an extension of NIH oversight**

IBCs Are an Extension of NIH Oversight



How do IBCs and OBA interact?

First point of contact: Registration

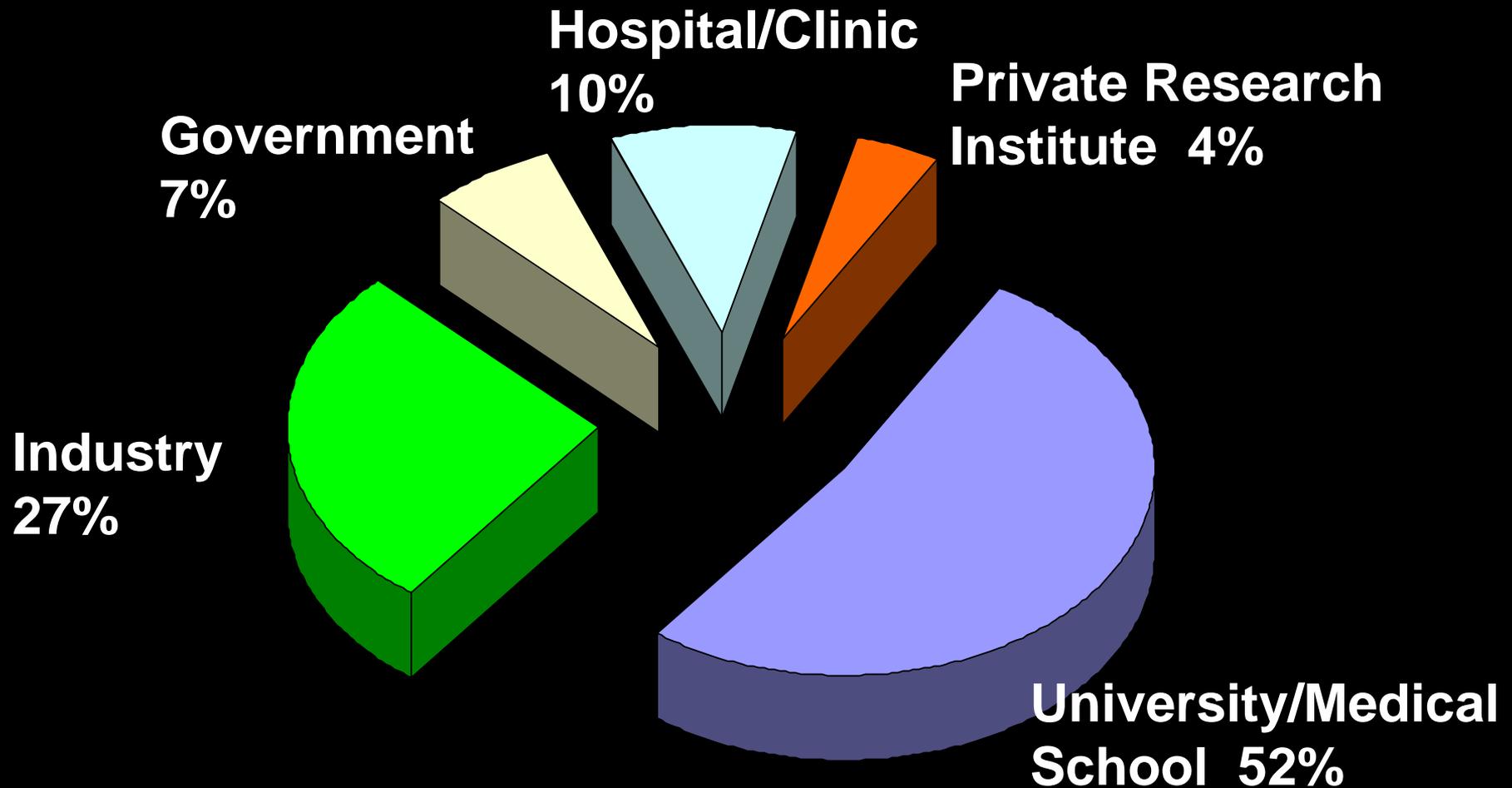
- **Provides assurance of local review of biosafety risks**
- **Allows OBA to see that general IBC expertise consistent with *NIH Guidelines***

Registration (cont'd):

- **Identifies the institutional point of contact and responsibility in case of problems, questions, concerns**
- **Provides census of field**
 - **Where is rDNA research being conducted?**

Institutional Biosafety Committees

n=450



How do IBCs and OBA interact?

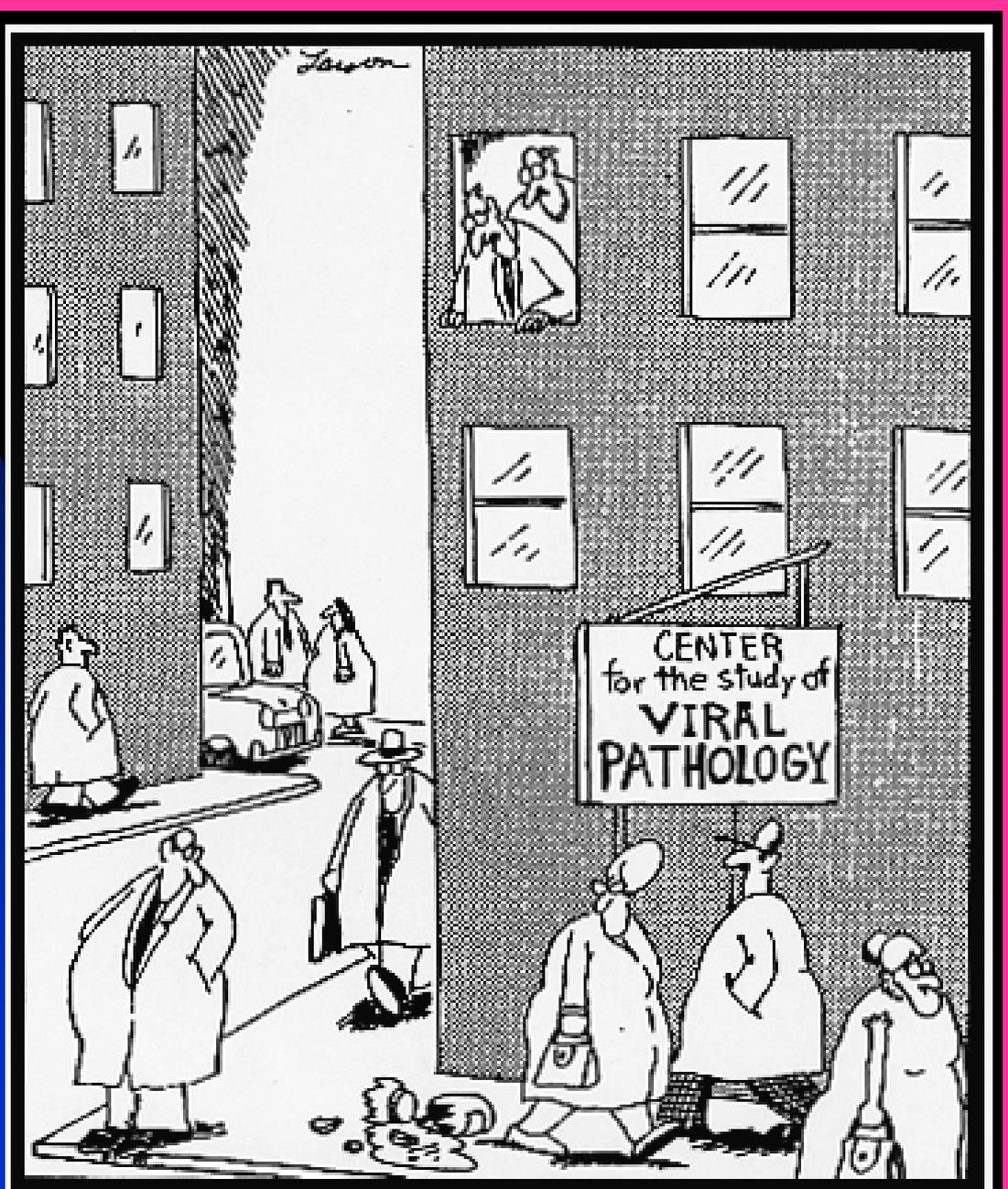
Subsequent contact: Annual reports and updates

- **Keeps contact information current**
- **Allows OBA to know of the ongoing status of the institution's rDNA research program**

How do IBCs and OBA interact?

Most important forms of interaction:

- IBCs serve as sentinels for issues in the field
- OBA serves as a resource for IBCs
 - ◆ OBA has scientific and medical staff available to answer queries
 - ★ Interpretation of NIH Guidelines
 - Containment
 - Exemptions
 - Risk group classification



"Uh-oh."

How do IBCs and OBA interact?

- **OBA serves as a resource for IBCs**
 - ◆ **OBA can provide information on risk assessment and containment practices on specific protocols similar to yours**
 - ★ **Results of RAC review**
 - **Meetings minutes**
 - **RAC findings and recommendations**

Organization of the *NIH Guidelines*

- Section I – Scope
- Section II – Safety Considerations
- Section III – Types of Experiments Covered
 - **IIIA** – IBC Approval, RAC Review, NIH Director Approval Mandatory
 - **IIIB** – NIH/OBA and IBC Approval Mandatory
 - **IIIC** – IBC and IRB Approval, RAC Review Mandatory
 - **IIID** – IBC Approval Before Initiation
 - **IIIE** – IBC Notification At Initiation
 - **IIIF** – Exempt Experiments
- Section IV – Roles and Responsibilities

New NIH OBA Initiatives

- **NIH Gene Transfer Safety Assessment Board**
- **National Database**
- **Clinical Safety Symposia**

NIH Gene Transfer Safety Assessment Board (GTSAB)



Functions of GTSAB

- **Analyze safety information across all trials**
 - ◆ **Recognize trends early**
 - ◆ **Report findings, conclusions, aggregated trend analysis for public discussion at RAC meetings**
- **Analyses will inform the IBC community, research participants, clinical investigators, basic scientists, IRBs, and the public**

Operation of GTSAB

- **Meets quarterly in closed session, prior to RAC meetings**
- **Provides reports to the RAC**
- **Publishes periodic summary reports**
- **Staffed by NIH OBA**
- **Implementation – collaboratively with FDA**

Development of a National Database for Gene Transfer Clinical Research



Genetic Modification Clinical Research System (GeMCRIS)

Key Features:

- **Relational database**
- **One electronic AE reporting format for two Federal agencies**
- **Query capable**
- **Web-based**
 - ◆ **Publicly accessible**
 - ◆ **Fire-wall to protect trade secret and confidential commercial information**

Genetic Modification Clinical Research System (GeMCRIS)

Key Functions:

- **Serve as an analytic tool for NIH, FDA, and advisory boards**
 - ◆ **Facilitate the evaluation and analysis of safety information from all gene transfer clinical trials**
- **Provide database reports that will inform diverse user groups**
 - ◆ **IRBs, IBCs, local DSMBs, investigators, research participants, and the general public**

Diverse User Groups

- **Federal Agencies**
- **National Advisory Committees**
- **IBCs and IRBs**
- **Policy Makers**
- **Patients**
- **General Public**
- **Investigators**
- **Sponsors**
- **Media**

Main Menu After Logon for System Administrator

GeMCRIS - Home - Microsoft Internet Explorer

File Edit View Favorites Tools Help

← Back → Search Favorites History

Address http://sherlock.resva.trw.com/gemcrisrpt/Contents/GC_HOME.asp Go Links >>

GeMCRIS

Genetic Modification
Clinical Research
Information System
Version 1.0

Home Public Information ▾ DHHS Functions ▾ Investigator AE Reporting System Help



Welcome to the NIH OBA Gene Transfer Clinical Research Information System -- Phase II. This system provides a more powerful tool for dissemination of gene transfer clinical research—particularly for Department of Health and Human Services users involved in pre-market reviews of clinical trial data. Additionally, we are using this Phase II system as a platform for gathering feedback on what other types of information public users would like to see. Please take a moment to respond to a series of questions that appear on a feedback form at the bottom of this page. Your feedback is critical to the ongoing design of future versions of the product, and it will help us take your needs into consideration as the development of the database continues.



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- ▶ [About RAC](#)
- ▶ [NIH Guidelines](#)
- ▶ [Documents \(With Quarterly Reports\)](#)

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Local intranet

Selection for Organization Reference Table Maintenance

GeMCRIS
Genetic Modification
Clinical Research
Information System
Version 1.0

Home	Public Information ▾	DHHS Functions ▾	Investigator AE Reporting	System Help
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Support

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Welcome to the NIH Information System, a powerful tool for disseminating research—particularly Services users involved in clinical trial data. Additionally, we are using this Phase II system as a platform for gathering feedback on what other types of information public users would like to see. Please take a moment to respond to a series of questions that appear on a feedback form at the bottom of this page. Your feedback is critical to the ongoing design of future versions of the product, and it will help us take your needs into consideration as the development of the database continues.

IND Information
Organization
Person
Unit of Measure
Protocol Status
Person Role
Intervention
Route of Administration
Gene Vocabulary ▶
Vector Vocabulary ▶
VPS Cell Vocabulary ▶
Ex-Vivo Cell Vocabulary ▶
Lab Test
PE Condition
Person Degree
Country

Done
Local intranet

Gene Transfer Clinical safety Symposium



Gene Transfer Clinical Safety Symposia

- **Public discussion of the most current medical and scientific data**
 - ◆ **2 to 4 times per year**
 - ◆ **Focus on classes of research (e.g., vector, clinical indication, patient population)**
- **Enhance research participant safety**
- **Optimize clinical trial design and development**

Gene Transfer Clinical Safety Symposia

- **December 1999** **Adenoviral Vector Safety and Toxicity – *prototype***
- **March 2000** **Internally Deleted, Helper Dependent (“gutless”) Adenoviral Vectors**
- **December 2000** **Cardiovascular Clinical Gene Transfer Research**
- **March 2001** **Adeno-Associated Virus**

Other ways OBA wishes to be a resource for IBCs:

- OBA is working with professional societies and associations to assist with professional development for IBCs
- OBA is exploring policy concerns germane to how IBCs function

Why a policy conference now?

**Little re-examination of IBC requirements in
25 years since the Guidelines first drafted**

- ◆ **Do the requirements still make sense?**
- ◆ **Have the requirements kept pace with
changing landscape of clinical
research?**
- ◆ **How do new clinical research and IBC
paradigms and the *NIH Guidelines*
mesh?**

What do the NIH Guidelines say about IBCs?

For all types of rDNA research:

**“The institution shall establish an Institutional Biosafety Committee whose responsibilities need not be restricted to recombinant DNA.”
(Section IV-B-2)**

- ◆ **What does it mean to “establish” an IBC (where? locally? how? by contract?)**
- ◆ **How many members must have a formal institutional affiliation?**

What do the NIH Guidelines say about IBCs?

For gene transfer in humans:

“...no research participant shall be enrolled...until...Institutional Biosafety Committee approval (from the clinical trial site) has been obtained...”

(Section I-A-1-a and elsewhere)

- ◆ What is the “site” for purposes of IBC approval (organizational entity? physical location?)?**

What do the *NIH Guidelines* say about IBCs?

Also, for gene transfer in humans:

“Institutional Biosafety Committee approval must be obtained from the institution at which recombinant DNA material will be administered to human research participants (rather than the site involved in manufacturing gene transfer products)”

(Appendix M preamble)

- ◆ **Should approval come from other types of “sites” (e.g., clinical follow-up)?**

General Policy Questions:

- What does the “I” in IBC mean?
- What is the nature of local oversight?
- In what ways should IBCs reflect community concerns?
- How should IBCs relate to the IRB?

What do we want from this conference?

- Specific comments about the expectations we should have of IBCs and their characteristics
- Views about how OBA should review and handle registrations of “non-traditional” IBC arrangements
- Opinions about how the *NIH Guidelines* should address IBCs