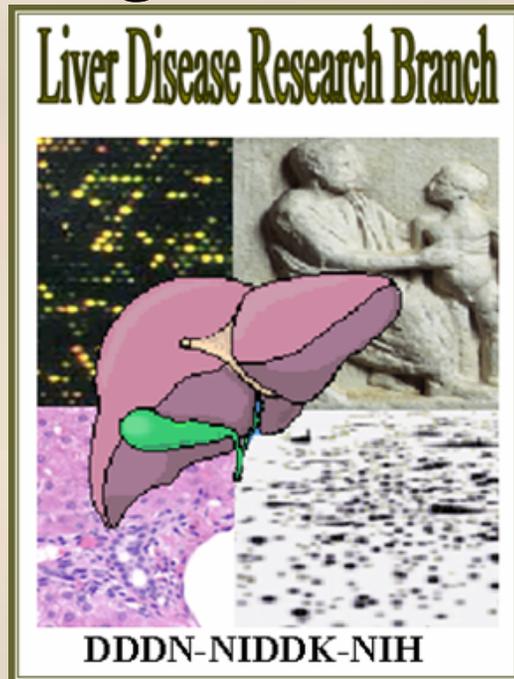


Initiatives in Liver Diseases Research, NIDDK

Jose Serrano M.D, Ph.D.

Liver Disease Research Branch

Division of Digestive Diseases and Nutrition, NIDDK



**Action plan
for liver
disease
research**

**November 25
2003**



Liver research supported by NIDDK (FY 2002)

Projects supported: 393

Budget (Total cost): \$136,797,147

Clinical Research: 128 projects (32.5%)

Basic Research:

Liver diseases: 119 projects (30.3%)

Liver function/structure: 146 projects (37.2%)



Liver Research Supported by NIDDK

(number of projects, FY 2002)

Division of Diabetes and Metabolism: 54

Cell signaling; nutrition and metabolism; gene regulation; pediatric and genetic liver diseases

Division of Kidney, Urology and Hematology: 22

Cell and molecular biology of the liver; Hemochromatosis/Iron metabolism and complication of chronic liver diseases

Liver Diseases Section, Digestive Diseases

Branch (Intramural): 10

Viral Hepatitis



Liver research supported by NIDDK

(number of projects, FY 2002)

Liver Disease Research Branch, DDDN: 307

Liver and Biliary Diseases Program

Digestive Disease Centers Program,

Clinical Trials Program,

Career Development and Training Program

SBIR Program.

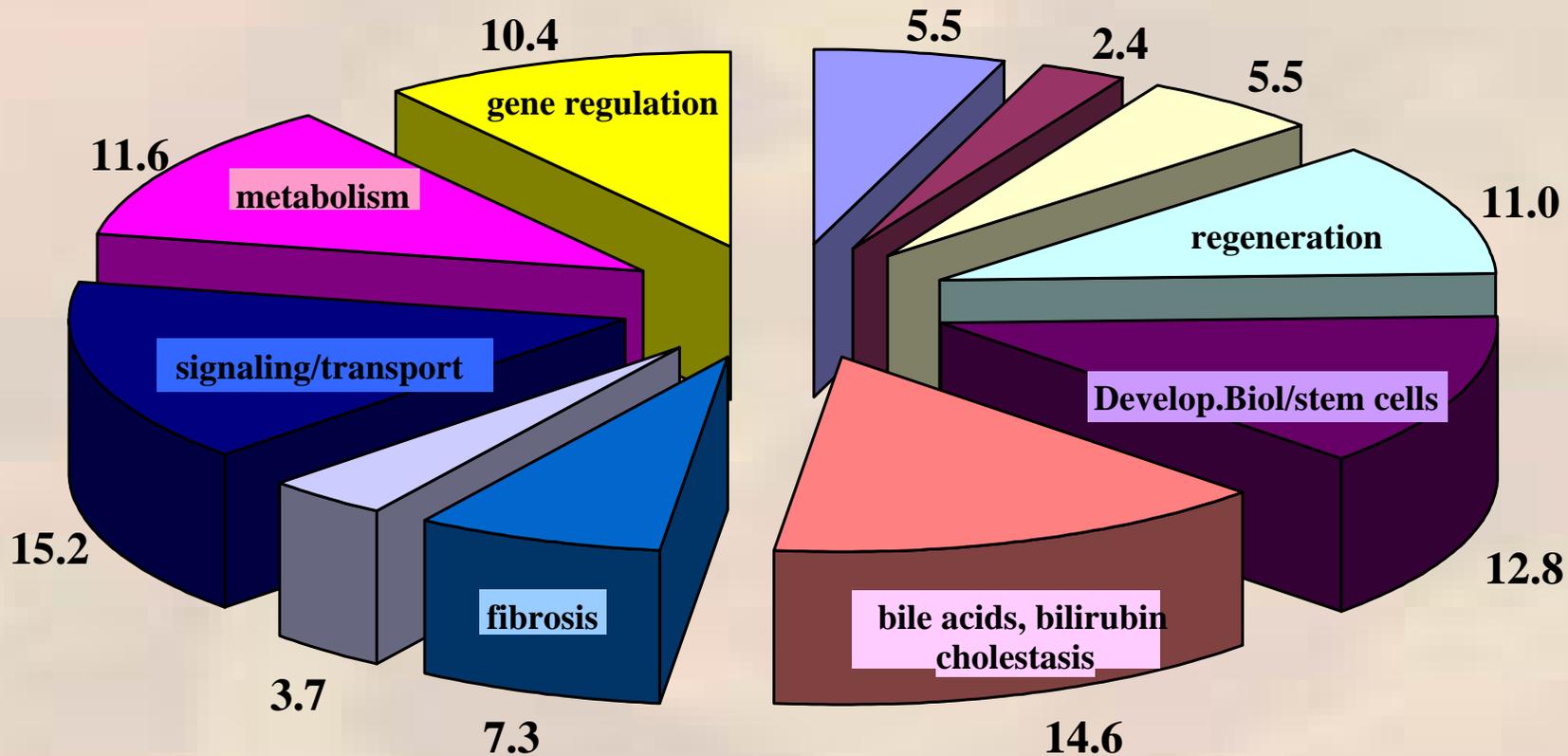


Areas of liver research supported by NIDDK (FY 2002)

	# Projects	\$
1. Cell& Molecular biology	164	\$50,482,970
2. Viral Hepatitis	47	\$28,200,824
3. Fatty liver disease	15	\$4,932,379
4. DILI	8	\$2,325,514
5. Autoimmune liver disease	8	\$2,912,433
6. Pediatric liver diseases	26	\$6,203,178
7. Genetic liver disease	34	\$12,429,140
8. Liver transplantation	30	\$7,616,032
9. Complications of chronic liver disease	19	\$3,924,780
10. Liver Cancer	1	\$246,925
11. Gallbladder disease	7	\$1,762,099
12. Bioengineering and Biotechnology	10	\$3,215,186



164 cell & molecular liver projects: areas of research (percentages)



Liver Research Funded by LDRB, NIDDK (FY2002)

Type	Number
Basic Research grants (R01, R03, R21)	183
Liver Centers	4
Program Projects (P01)	5
MERIT Awards (R37)	5
Clinical Research (R01,R03, U01)	47
Career Development Awards	44
Institutional Training Grants (T32)	8
Small Business Awards/ Small business technology transfer (R41,42,43,44)	4
Fellowships (F32)	7
TOTAL	307



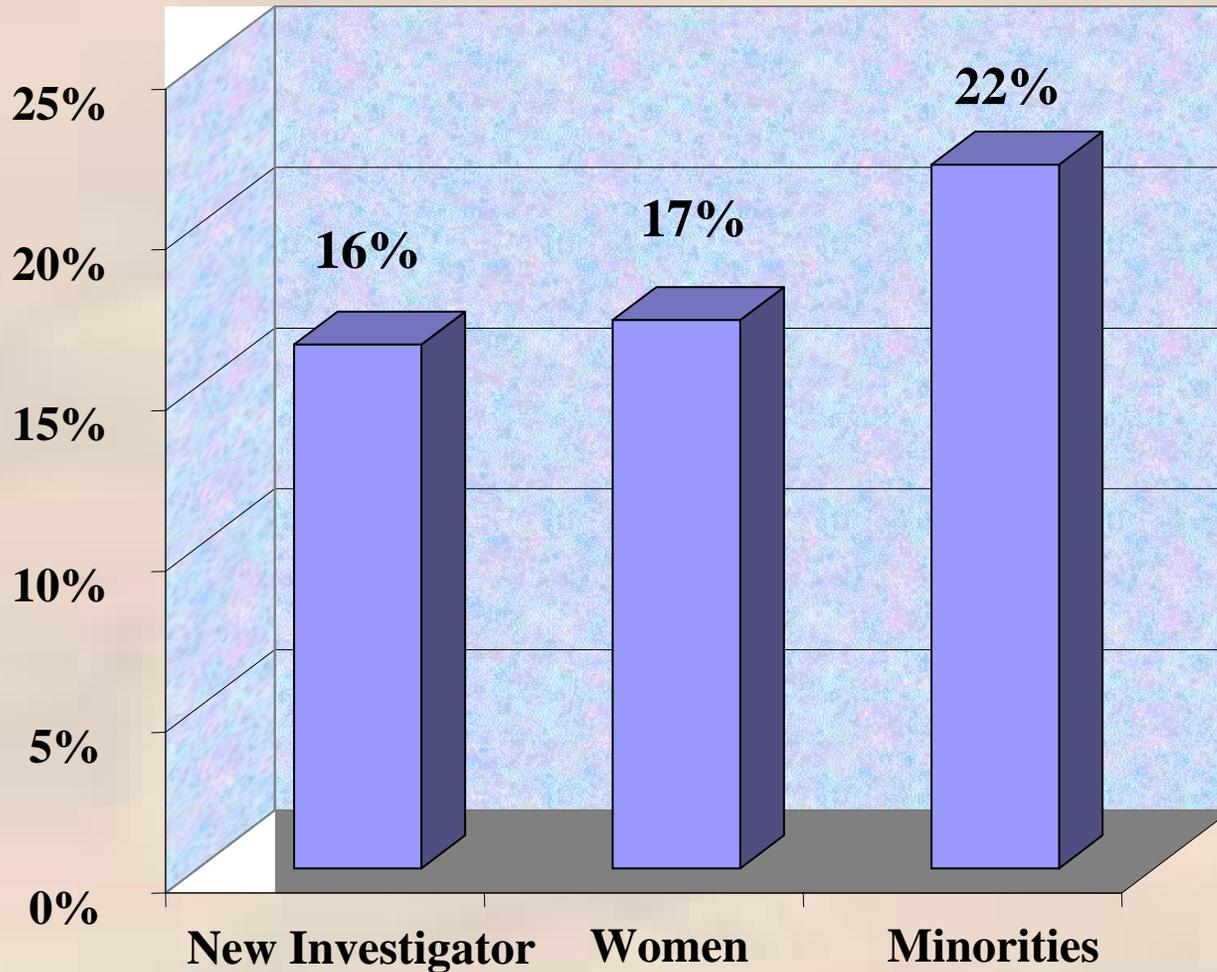
Training and Career Development awards funded grants by DDDN, NIDDK, FY2003

Type	LDRB	DDD Total	%Liver
K01	5	32	16
K08	25	81	30
K23	6	20	30
K24	4	17	24
K24	2	4	50
K18	1	1	100
	41	155	26.5
F32	3	35	9



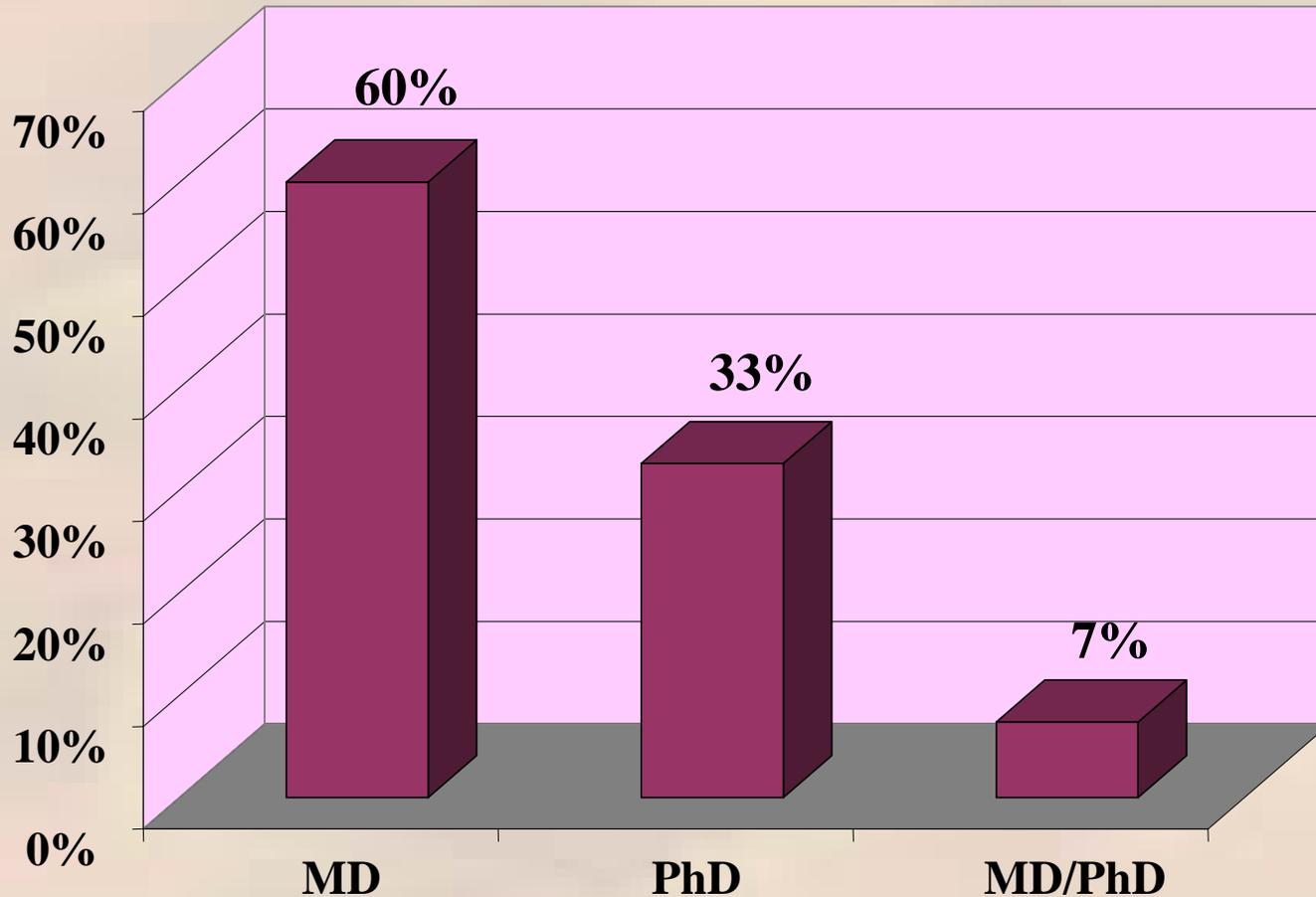
Liver research supported by NIDDK

Demographics



Liver research supported by NIDDK

Demographics



2003-04 FUNDED INITIATIVES:

RFA DK 03-011

Hepatitis C: Natural History, Pathogenesis, Therapy And Prevention

NCI, NHLBI, NIAAA, NIAID, NIDA, NIDDK

RFA DK02-033

Hepatotoxicity Clinical Research Network

Antiviral Therapy of Hepatitis C in Children

NIDDK & FDA (Office Orphan Products)



Multicenter clinical studies supported by the LDRB, NIDDK

High-dose Ursodiol Therapy of Primary Sclerosing

Cholangitis Placebo-controlled trial. High doses of ursodiol (20-25 mg/kg/day) or placebo for 2 years

Peginterferon and Ribavirin for Pediatric Patients

with Chronic Hepatitis C. Prospective, randomized controlled trial of peginterferon alone or with ribavirin in children with chronic hepatitis C. co-funded by the FDA, Office of Orphan Product Development and industry sponsor.

Nonalcoholic Steatohepatitis Clinical Research

Network two prospective randomized controlled trials of insulin-sensitizing agents versus vitamin E versus placebo, one study in children (using metformin) and one in adults (using pioglitazone). NICHD and NCMHD



Multicenter clinical studies supported by the LDRB, NIDDK

Viral Resistance to Antiviral Therapy of Chronic

Hepatitis C (Virahep-C) Prospective study of peginterferon and ribavirin therapy in previously untreated patients with chronic hepatitis C infected with genotype 1.

NCMHD and a CRADA with Roche Laboratories, Inc.

Acute Liver Failure Study Group. Acute liver failure is an uncommon (5% liver transplants) but serious and distinctive clinical syndrome marked by sudden onset of signs of hepatic failure in patients without pre-existing liver disease.

Hepatitis B Orthotopic Liver Transplantation Study.

A prospective database on all patients undergoing liver transplantation for hepatitis B associated end-stage liver disease or hepatocellular carcinoma.



Multicenter clinical studies supported by the LDRB, NIDDK

Biliary Atresia Research Consortium Both retrospective and prospective studies of children with biliary atresia and a similar number of controls with other neonatal liver diseases. **Office of Rare Diseases**

HALT-C Trial (Hepatitis C Antiviral Long-Term Treatment against Cirrhosis) **Trial** is a multi-center, randomized controlled study to determine if long-term treatment with peginterferon in previous non-responders with advanced hepatic fibrosis can prevent cirrhosis. **NCI, NIAID, the NCMHD, a CRADA with Roche Laboratories.**

Adult-to-Adult Living Donor Liver Transplantation Cohort Study (A2ALL) .The major goals of A2ALL are to define the relative risks and benefits of living compared to deceased donor liver transplantation and to optimize the safety and efficacy of the procedure for donors.



Multicenter clinical studies supported by the LDRB, NIDDK

The Drug-Induced Liver Injury Network Both a prospective and retrospective database on drug-induced liver disease.

**North American treatment of Refractory Ascitis
(NASTRA)**

**Multicenter randomized trail of DSRS vs. TIPS
(DIVERT)**

Ursodiol-Methotrexate for PBC (PUMPS)

Esophageal Varices by beta-adrenergic blockers



Planned Meetings:

**Hepatocellular Carcinoma:
April 1-3, 2004**

**Silymarin and chronic liver diseases.
Spring 2004**

**IFN: molecular predictors of action.
Summer 2004**

**Liver Disease in Native Americans.
Winter 2004**



Future Initiatives:

The Liver Proteome Initiative

Autoimmune hepatitis

Ancillary studies in liver diseases

Silymarin & SAME for chronic liver disease

Hepatocellular carcinoma

