A View of the Surveillance Research Program's Biostatistical Grants Portfolio

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About Statfund Website

❖ **http://statfund.cancer.gov** provides information on currently funded statistical grants within the Division of Cancer Control and Population Sciences. This Statistical Grant Portfolio is managed by Ram Tiwari, Ph.D., a Program Director and Mathematical Statistician in the Statistical Research and Applications Branch (SRAB).

❖ The **Biostatistical Methods and Research Design (BMRD) Study Section** reviews statistical methodology grants. About 50% of NIH grant applications reviewed under BMRD are from NCI.

❖ The Statistical Grant Portfolio consists of funded projects in biometry and biostatistics. These projects are classified into categories using **areas of application** to NCI and **biostatistical methods**.

❖ The **http://statfund.cancer.gov** website provides relevant information about the funding mechanisms and opportunities at NIH.

SRP's Program Directors

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Funded Statistical Grants

Subject Areas of Application

- ❖ Carcinogenicity
- ❖ Diagnosis/Diagnostic Tests
- ❖ Dietary Assessment
- ❖ Etiology/Epidemiologic Studies
- ❖ General Methods
- ❖ Genetics
- ❖ Medical Decision Making

- ❖ Natural History
- ❖ Outcomes Research
- ❖ Prevention
- ❖ Screening
- ❖ Surveillance Research
- ❖ Treatment
- ❖ Tumor Growth

Funded Statistical Grants (cont'd)

Biostatistical Methods

- Age-Period-Cohort Models
- Bayesian Inference
- Group Randomization
- Hierarchical Models
- Kernel Models
- Latent Variable Models
- Longitudinal Data/Repeated Measurements
- Measurement Errors
- Meta Analysis
- Missing Data
- Mixed/Random Effects Models

- Resampling Methods
- ROC Methodology
- Sequential Analysis
- Simulations/Stochastic Models
- Small Area Estimation
- Small Sample Methods
- Spatial/GIS Models
- Study Design
- Survival Analysis
- Time Series Models
- Other Statistical Methods

Funded Statistical Grants (cont'd)

Other Funded Grants

- ❖ Cancer Intervention and Surveillance Modeling Network (CISNET)

- ❖ Conference Grants

- ❖ Statistical Software

Carcinogenicity

PI Name Organization Name	Project Title (click for Abstract)	Grant Number (click for Publications)*
Morris, Jeffrey S. UNIVERSITY OF TEXAS MD ANDERSON CAN CTR	ADAPTIVE METHODOLOGY FOR FUNCTIONAL BIOMEDICAL DATA	1R01CA107304-01 Search PubMed Directly
Nuckols, John R. COLORADO STATE UNIVERSITY-FORT COLLINS	GEOGRAPHIC-BASED EXPOSURE ASSESSMENT OF AGRICULTURAL CH*	5R01CA092683-04 Search PubMed Directly
Piegorsch, Walter W. UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA	LOW-DOSE RISK BOUNDS VIA SIMULTANEOUS CONFIDENCE BANDS	2R01CA076031-07A1 Search PubMed Directly
Ryan, Louise M. HARVARD UNIVERSITY (SCH OF PUBLIC HLTH)	BIOSTATISTICAL TOPICS IN CARCINOGENICITY AND TERATOLOGY	5R01CA048061-16 Search PubMed Directly

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Project Title

Project Title

[BIOSTATISTICAL TOPICS IN CARCINOGENICITY AND TERATOLOGY](#)

(click for Abstract)

Cancer Control Research Grant: Abstract

5R01CA048061-16
Ryan, Louise M.
BIOSTATISTICAL TOPICS IN CARCINOGENICITY AND TERATOLOGY

DESCRIPTION (provided by applicant): This is a competing proposal for applied statistical research motivated by environmental studies, both in humans and animals, and related to carcinogenicity, teratology and other health outcomes. Specific aims are: 1) Time to event analyses for data arising from complex pregnancy and birth cohorts; 2) Statistical models for high dimensional covariates and outcomes; 3) Improved methods for dose response modeling for the purpose of quantitative risk assessment; 4) Goodness of fit for general linear mixed models. Empirical data analysis will play a central role in achieving the specific aims. In addition to addressing important real world questions motivated by environmental risk assessment, the proposed research offers useful contributions to general statistical methodology in survival analysis, clustered data methods, hierarchical modeling and analysis of multiple outcomes. Both Bayesian and frequentist approaches will be used.
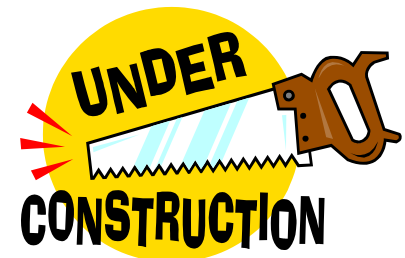
Grant Number

5R01CA048061-16
Search PubMed Directly

(click on Search PubMed Directly for Publications)*

* **Includes all publications listed in PubMed authored by the Principal Investigator and supported by the specified grant. Please note that not all grants have publications listed in PubMed, and the listing of publications in PubMed may not be complete.**

PubMed

1:   Ryan L, Huang W, Thurston SW, Kelsey KT, Wiencke JK, Christiani DC.
On the use of biomarkers for environmental health research.
Stat Methods Med Res. 2004 Jun;13(3):207-25.
PMID: 15198487 [PubMed - indexed for MEDLINE]

2: Li Y, Ryan L.
Modeling spatial survival data using semiparametric frailty models.
Biometrics. 2002 Jun;58(2):287-97.
PMID: 12071401 [PubMed - indexed for MEDLINE]

3: Betensky RA, Lindsey JC, Ryan LM, Wand MP.
A local likelihood proportional hazards model for interval censored data.
Stat Med. 2002 Jan 30;21(2):263-75.
PMID: 11782064 [PubMed - indexed for MEDLINE]

4: Corcoran C, Ryan L, Senchaudhuri P, Mehta C, Patel N, Molenberghs G.
An exact trend test for correlated binary data.
Biometrics. 2001 Sep;57(3):941-8.
PMID: 11550948 [PubMed - indexed for MEDLINE]

5: Cook RJ, Brumback BB, Wigg MB, Ryan LM
Synthesis of evidence from epidemiological studies with interval-censored exposure due to grouping.
Biometrics. 2001 Sep;57(3):671-80.
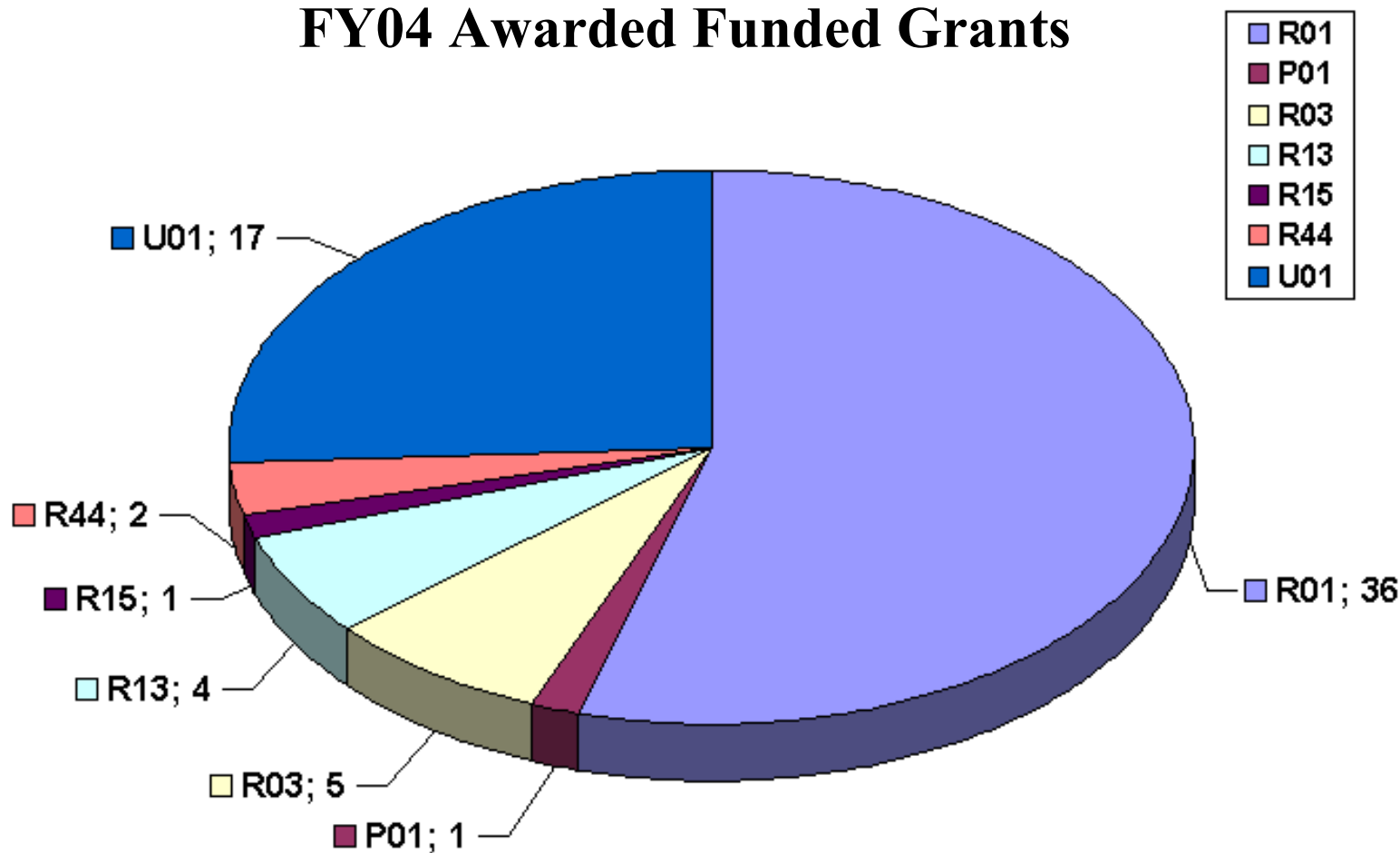PMID: 11550914 [PubMed - indexed for MEDLINE]

Funding Mechanisms

❖ **R01**   **Research Project Grant** -- supports a discrete, specified research project to be performed by a primary investigator and may include other investigators in an area representing a specific interest or competency. This is generally referred to as a traditional research project grant.

❖ **R03**   **Small Research Grant** -- provides research support specifically limited in time and amount for studies in categorical program areas. These grants provide flexibility for initiating studies that are generally for preliminary short-term project and are non-renewable.

❖ **R13**   **Conference Grant** -- supports national or international meetings, conferences, and workshops that are of value in promoting the goals of the NCI Program.

❖ **R15**   **Academic Research Enhancement Award** -- supports small scale research projects conducted by faculty in primarily baccalaureate degree-granting domestic institutions.

❖ **R21**   **Exploratory/Development Grant** -- supports the development of new research activities in categorical program areas, and is generally restricted in level of support and in time.

❖ **R44**   **Small Business Innovation Research Grant (Phase II)** -- continue R&D efforts started in Phase I (R43 Grants). Awards are based on the results of Phase I and the scientific and technical merit and commercial potential of the Phase II application. Only Phase I awardees are eligible for Phase II.

❖ **P01**   **Research Program Project Grant** -- supports an integrated, multiproject research approach involving a number of independent investigators who share knowledge and common resources.

❖ **U01**   **Research Project Cooperative Agreement** -- supports discrete, specified, circumscribed projects to be preformed by the named investigator(s) in an area representing their specific interests and competencies.
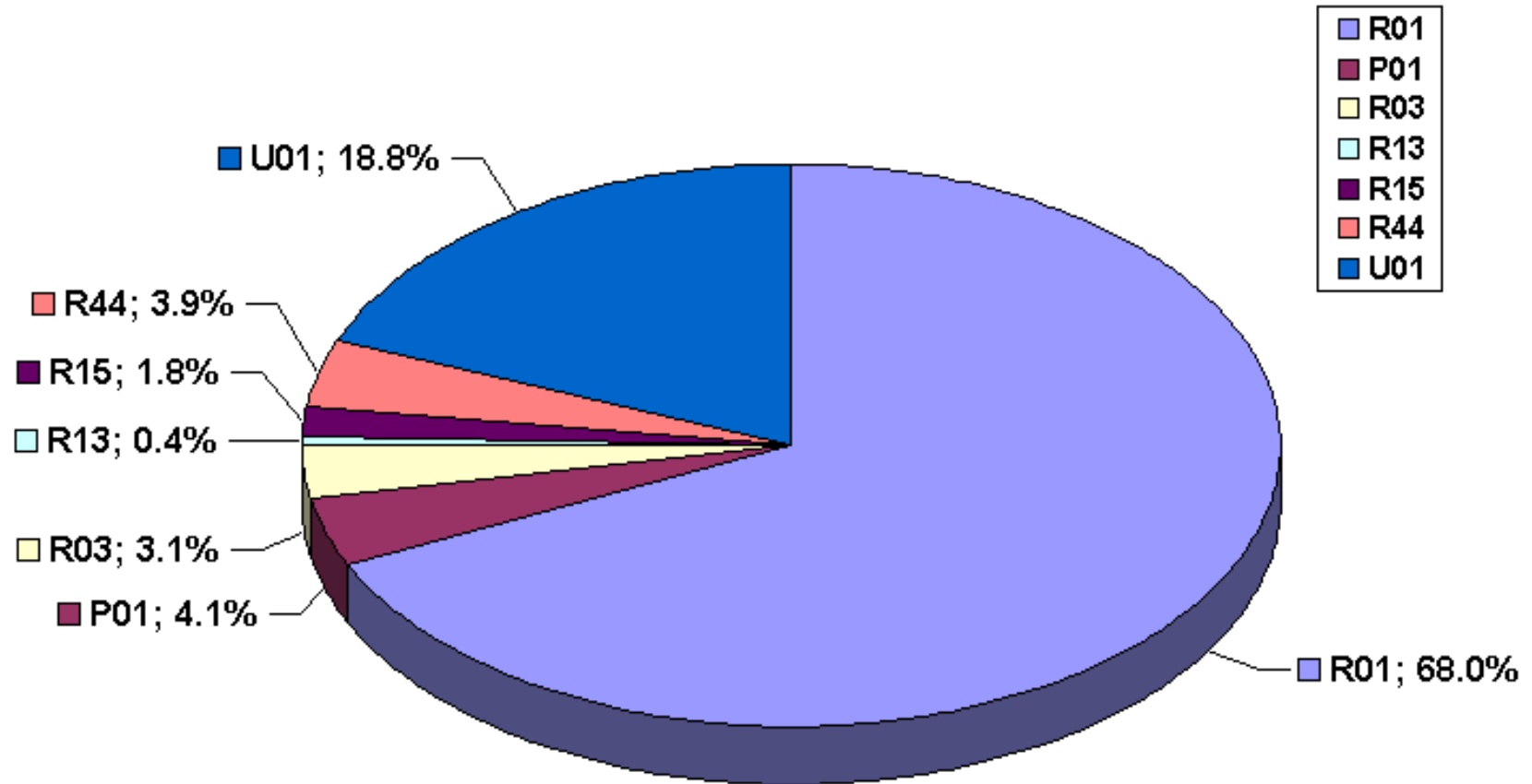
FY04 Awarded Funded Grants

SRP's Statistical Grants Portfolio
FY04 Total Awards
$12,158,334

Legend:
- R01
- P01
- R03
- R13
- R15
- R44
- U01

- U01; 18.8%
- R44; 3.9%
- R15; 1.8%
- R13; 0.4%
- R03; 3.1%
- P01; 4.1%
- R01; 68.0%

http://statfund.cancer.gov Links

Funding Opportunities In Biostatistics
Division of Cancer Control and Population Sciences

NATIONAL CANCER INSTITUTE

STATISTICAL RESEARCH AND APPLICATIONS BRANCH

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Related Links

- ❖ About statfund.cancer.gov
- ❖ Funded Statistical Grants
- ❖ Statistical Study Sections
- ❖ Program Directors for the DCCPS Statistical Portfolio
- ❖ Special Funding Solicitations
- ❖ Application Forms and Instructions
- ❖ Other Funding Sites
- ❖ Articles Related to Funding at NIH
- ❖ Biostatistical Groups at NCI

Related Materials

- ❖ Center for Scientific Review: Referral Procedures
- ❖ Cancer Intervention and Surveillance Modeling Network

Other Relevant Study Sections Which Review Statistical Methodology Grants

❖ **Biostatistical Methods and Research Design (BMRD) Study Section** reviews applications that focus primarily upon advancing techniques and technologies that address important statistical and mathematical issues.

❖ **Health Services Organization and Delivery (HSOD) Study Section** reviews applications that are predictors, processes and outcomes of health services, including availability, access and acceptability.

❖ **Modeling and Analysis of Biological Systems (MABS) Study Section** reviews applications that develop modeling/enabling technologies to understand the complexity of biological systems.

❖ **Biodata Management and Analysis (BDMA) Study Section** reviews applications that aim to develop technologies for the management and analysis of basic biological data.

(continued)

- ❖ **Genomics, Computational Biology and Technology (GCAT) Study Section** reviews applications which involve global and integrative analyses of biological systems.

- ❖ **Social Sciences and Population Studies (SSPS) Study Section** reviews applications related to population processes, composition and distribution.

- ❖ **Biomedical Computing and Health Informatics (BCHI) Scientific Review Group** reviews grant applications involving basic research and applications of computational science to knowledge and information in biomedicine, healthcare and their integration.

Partial Listing of Useful NCI PAs

PA No.	Funding Mechanism	Title
PAR-04-159	R03	Small Grants Program for Cancer Epidemiology
PA-05-090	R01, R03, R21	Methodology and Measurement in the Behavioral and Social Sciences
PAR-05-063	R01	Collaborations with National Centers for Biomedical Computing
PAR-05-057	P01, P41, P50, P60, R01, R33	Continued Development and Maintenance of Software
PAR-05-011	K22	NCI Transition Career Development Award to Promote Diversity
PAR-04-055	K07	Cancer Prevention, Control, Behavioral and Population Sciences Career Development Award
PAR-04-040	K22	The NCI Transition Career Development Award
PAR-04-020	R03	Small Grants for Behavioral Research in Cancer Control
PAR-04-011	R01	Cohort Studies in Cancer Epidemiology
PAR-03-009	R01, R21	Improving Diet and Physical Activity Assessment

NCI's Research Project Grant Mechanisms and FY 2005 Paylines

Mechanism	Description	Payline
R01	Traditional Grants	16.0 percentile
*(STAR) R01	First Time *R01 (by special exception)	20.0 percentile
Large R01	Over $700,000 Direct Cost	8.4 percentile
P01	Program Projects	To be determined
R03	Small Grants	210 priority score
R15	Academic Research Enhancement Award Grants	170 priority score
R21	Exploratory Grants	170 priority score
R21/R33	Exploratory Grants	160 priority score
R33	Exploratory/Developmental – Phase II	160 priority score
R41	STTR	185 priority score
R42	STTR	185 priority score
R43	SBIR	176 priority score
R44	SBIR	176 priority score