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LETTERS

Funding of Newly Submitted NIH Grant Applications

Data provided in public statements by the National Institutes of Health (NIH) indicate that the overall success rate, that is, funding of investigator-initiated research project grants (RPGs), is about 1 in 4. For the past few years, a number of scientists in the biomedical community have questioned these data on the basis of impressions that the funding of newly submitted R01 applications seemed appreciably less likely.

The National Caucus of Basic Biomedical Science Chairs requested additional data from NIH to explain this apparent discrepancy. As fiscal year 1994 data are not available until later in 1994, the latest figures available from NIH are for fiscal year 1993. They show an overall success rate (number of grants paid divided by the number of applications reviewed) for RPGs of 24.5%. This rate includes several kinds of grants, including those to First Independent Research Support and Transition (FIRST) award (R29) applicants as well as competing renewal (Type 2 R01) applications. The success rate for competing new (Type 1) R01 research project applications was only 15.4% in fiscal year 1993 (Table 1). In contrast, other RPG applications did somewhat better. For example, Type 2 R01 applications had a success rate of 36.1%, and R29 applications from newly independent investigators had a success rate of 26.8%.

Table 1. Success rates for fiscal year 1993 NIH competing research project applications (RPG) new type 1 unsolicited proposals (R01 and R29 only).

NIH institute	Success rate (%)	
	Traditional awards (R01)	FIRST awards (R29)
NIAAA	15.5	33.3
NIA	14.6	34.0
NIAID	18.2	28.9
NIAMS	11.5	18.3
NCI	14.0	27.1
NIDA	22.5	35.5
NIDCD	21.9	43.2
NIDR	18.9	37.9
NIDDK	11.9	26.4
NIEHS	15.2	13.0
NEI	24.5	39.5
NIGMS	17.5	25.4
NICHD	13.3	19.8
NCHGR	16.9	0.0
NHLBI	14.4	25.1
NIMH	11.1	27.7
NCNR	14.1	16.7
NINDS	16.4	25.4
NCRR	26.8	50.0
NIH weighted average	15.4	26.8

These results confirm the experience of many applicants that the likelihood of funding a new R01 application on its first review cycle in fiscal year 1993 was much less than 25%, having been as low as 11.1% for the National Institute of Mental Health. These are the traditional, unsolicited, investigator-initiated applications that have been the heart of the NIH extramural program and on which so many major advances in biomedical research have depended. We fear that the success rate for fiscal year 1994 could be further diminished. This information will help lawmakers and other governmental officials responsible for NIH budget appropriations to become more aware of the funding difficulties experienced by biomedical scientists. The extremely low likelihood of permitting excellent research ideas to be pursued at the present time implies that many outstanding peer-reviewed projects now are being denied funding. This lack of funding will adversely affect the quality of life by impeding seriously the progress toward the cure and prevention of disease. Breakthroughs in biotechnology that have signaled major advances for mankind and the U.S. economy could also be delayed.

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EMBL and European Cooperation in the Life Sciences

At its November meeting, the European Molecular Biology Laboratory (EMBL) Council, representing the 15 member states of EMBL, voted unanimously for two important decisions. Formulated in close cooperation between the Director-General and the Council, they deal with two distinct aspects of enhancing cooperation in the life sciences in Europe.

The first decision deals with an initia-

tive currently under way, to support European infrastructure facilities in three strategically important areas: bioinformatics, macromolecular structure, and stock centers and genetic archives. The need for such support emerged from discussions in expert committees invited to advise Commissioner A. Ruberti on the life sciences in the European Union's (EU's) next Framework Programme. To ensure multilateral action, the Commissioner invited national and international organizations, including EMBL, to develop a coherent plan of facilities on a continental scale, irrespective of location or institutional affiliation. Proposals are to be submitted and evaluated competitively, by the EU's standard procedures. The EMBL resolution supporting this initiative is as follows.

It is widely recognised that modern biological research and biotechnology often depend on unimpeded access to major service infrastructure facilities. Examples include databases of macromolecular sequence and three-dimensional structure, facilities for determination of biological structures at high resolution, and repositories of mutant animals. Technical developments in recent years have greatly increased the complexity and cost of these required facilities. Accordingly, efficiency in resource utilisation and effectiveness in provision of service now require that these facilities operate on an international scale. For maximal added value, these facilities should be coordinated. With the encouragement of the EU, a concrete initiative in this direction is emerging from multilateral discussions, involving national research organisations and EMBL; it envisages applying to the EU for support to establish, develop and maintain infrastructures for the benefit of European life sciences research. The EMBL Council enthusiastically endorses this initiative, with the following understandings:

a. Facilities will be accessible to all EMBL as well as all EU member states.
b. Technical advice will be offered to the coordinating body of the cooperating organisations by international committees of experts, irrespective of nationality, nominated by the organisations and co-chaired as follows:
   - Bioinformatics: P. Zanella, G. Cameron
   - Macromolecular structure: C. I. Brändén, S. Cusack
   - Genetic archives: P. Gruss, P. Rigby
c. The Director-General will participate in the coordinating body of the cooperating organisations.
d. Two core facilities under this action will be the existing EBI [European Bioinformatics Institute] and Grenoble Outstations.
e. As part of the infrastructure initiative, it is expected that the third core facility will be a newly established European EU-funded mouse genetic archive. EMBL notes that a leading candidate for hosting this archive is the Monterotondo [Italy] campus. Subject to being satisfied on the technical, logistic and organisational provisions, with the benefit of advice from the P. Gruss/P. Rigby expert committee, EMBL will be happy to support the candidacy of Monterotondo, considering also the expected positive synergy with research groups to be established on the same campus both by EMBL and by CNR [Consiglio Nazionale delle Ricerche]. While welcoming cooperation, EMBL does not claim control or responsibility for the genetic archive which will be a distinct international institution, and incurs no financial obligation beyond supporting its own four research groups at Monterotondo.
f. Networks of complementary facilities will be associated with the three cores; the nodes will be selected by scientific criteria according to the functions required, without regard to their location, which could be in any EU or EMBL member country.

The second EMBL decision pertains to a separate, bilateral issue—Italy's continuing membership in EMBL. It is in response to the Italian government's request that resources previously committed for "regional groups" in Italy be used to create an international nucleus of research on mouse genetics at the Monterotondo campus near Rome. The EMBL decision is as follows.

In the expectation that an EU-supported mouse genetic archive will be established at Monterotondo near Rome, and that CNR will also move related activities there, EMBL agrees to establish on the same campus four research groups working on mouse genetics, subject to the following conditions:

a. Italy remains an EMBL Member State and contributes its full share of the EMBL Indicative Scheme.
b. These groups are a substitute for the regional groups committed to Italy by [the] Council in December 1993 and will be assigned comparable resources.
c. The group leaders will be recruited internationally, and will be selected by EMBL with the help of a committee of experts appointed by the Director-General.
d. The terms of appointments to these groups will be the same as for other EMBL personnel.
e. Italy undertakes, as necessary, to reach an appropriate host site agreement with EMBL in a timely manner.

These decisions are part of EMBL's continuing efforts toward cooperative development of European molecular biology.

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Expressed Sequence Tags

On behalf of the American Society of Human Genetics, we would like to commend Merck and Company, Inc. for its decision to support an open policy of data and reagent sharing for a comprehensive, publicly available database of human Expressed Sequence Tags (ESTs) and a cor-