

The Outstanding Junior Investigator Program

OJI Awards are Research Grants that Support Junior Faculty  
Research Programs

They are usually the first independent research funding a junior  
faculty member receives

OJI awards are very competitive and prestigious  
Only about 1 in 5 proposals is accepted

Recognition of excellence is an important aspect of awards

Awards remain active until awardee either receives tenure or  
leaves the institution at which the award was granted  
(typically about 5 years)

Awards are made in the fields of  
Theoretical High Energy Physics  
Experimental High Energy Physics  
Accelerator Physics

New awards are made only to  
Untenured Faculty (not postdocs) and to  
Untenured Lab Scientists in equivalent positions

## Peer Review x 2

Goal of Program is to identify the best people in  
High Energy Physics early in their careers and to  
Nurture their research programs

An opportunity for significant recognition

Identifies Up-and-Coming Leaders

### Success of Program comes from Thorough Peer Review

An *ad hoc* Committee has a Key Role:

Committee membership rotates — two year terms

Currently 4 members

The Committee helps in OJI selection,  
but does not do the selecting

### Double Peer Review Process

Proposals are anonymously peer reviewed by mail

Committee helps choose reviewers

Proposals then discussed in competition with each other with  
the Committee

Final Selection by DOE

## Basic Parameters of the Program

Average number of new awards per year: 7

Average number of proposals per year: 33 (53 this year!)

Funding for new awards each year:

\$400K    \$500K

Slightly more theory proposals than experiment

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Scarcely any accelerator physics proposals

The average funding per award is much greater in experiment than in theory (up to a factor of 2)

### Allowable Costs

Funding takes into account all resources available to awardee

Tailored to Specific Needs

OJI awards have covered all categories of research costs in all combinations, from 100% apparatus to 100% academic year salary

Recent OJI Committees

|      |                                   |      |
|------|-----------------------------------|------|
| 2000 | Gary Feldman<br>Bob Sugar         | 1999 |
|      | Mike Dine<br>Kay Kinoshita        |      |
| 1998 | Paul Langacker<br>Wes Smith       | 1997 |
|      | Dave Hitlin<br>Frank Wilczek      |      |
| 1996 | Ann Nelson<br>Bill Reay           | 1995 |
|      | Arie Bodek<br>Mark Wise           |      |
| 1994 | Marty Einhorn<br>Melissa Franklin | 1993 |
|      | Bob Cousins<br>Mike Peskin        |      |
| 1992 | Ann Kernan<br>Bill Marciano       | 1991 |
|      | John Kogut<br>Frank Sciulli       |      |
|      | Tom Applequist<br>Tom Ferbel      |      |

## Characteristics of Successful Proposals

Proposer has a track record of research accomplishment which has already attracted notice

Work of proposer is perceived as having considerable impact, whether in theoretical developments or the success of an experiment

Proposal is for a project that the proposer has independently devised and represents his or her creation

Proposer has demonstrated scientific leadership even before taking his or her initial faculty position

OJI 's and former OJI 's are disproportionately represented in leadership roles, such as representatives of collaborations, DPF officers or active participants, conference organizers, ...

Proposer's talent, creativity, and inventiveness have become recognized well beyond the circle of those who have some direct relationship with him or her

## Concrete Value of the OJI Program

### To the Awardees

OJI awards provide research funding which is completely under the control of the awardees, and so give the OJI much more real freedom in choosing research directions than typical within a larger group

OJI awards give independent creative but unestablished particle physicists resources with which to develop their personal research programs; OJI awards buy scientific independence as well as tangible resources

OJI awards are recognized as significant honors; they can enhance the position of a recipient within his or her institution and even smooth the path to tenure

### To the DOE and the Physics Community

Program identifies to the DOE and others some of the upcoming leaders of the field at an early stage in their careers

Corollary: It identifies junior scientists whose desires and opinions should be given more than equal weight

DOE puts all new high energy physicists applying for research grants into the OJI review process and uses the results as a calibration

The OJI program insures that the DOE will initiate funding to a small but steady flow of new young people into High Energy Physics, each and every year, no matter what the budgetary situation may be

**ANNOUNCEMENT OF THE 2001 DEPARTMENT OF ENERGY  
OUTSTANDING JUNIOR INVESTIGATOR AWARDS  
IN HIGH ENERGY PHYSICS**

The Division of High Energy Physics has selected the FY 2001 Awardees in the Outstanding Junior Investigator Program.

The successful proposals were selected on the basis of their scientific and technical merit from among 53, in experimental and theoretical high energy physics and in accelerator physics, submitted to the program this year.

The Outstanding Junior Investigator Award recipients for FY 2001 are:

|                   |                                  |
|-------------------|----------------------------------|
| Darin Acosta      | University of Florida            |
| Andrew Brandt     | University of Texas - Arlington  |
| Csaba Csaki       | Cornell University               |
| Regina Demina     | Kansas State University          |
| Ulrich Heintz     | Boston University                |
| Wayne Hu          | University of Chicago            |
| Matthew Strassler | University of Pennsylvania       |
| Raman Sundrum     | Johns Hopkins University         |
| James Wells       | University of California - Davis |

The program was initiated in 1978 by the Department of Energy's Office of Energy Research, to assist in the support of research by outstanding untenured high energy physicists. Including the above, there have been 171 Awardees, of whom 140 now hold tenured university or laboratory positions, 25 are on tenure track, and 6 have left high energy physics.

Unsolicited Outstanding Junior Investigator proposals in experimental or theoretical high energy physics or accelerator physics should be received by the DOE Division of High Energy Physics by November 1, 2001 for consideration during the 2002 fiscal year. These proposals should be for named individuals and submitted through a sponsoring institution. For additional information, see the 2002 Outstanding Junior Investigator Program Announcement on the World Wide Web, or contact:

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