

**Fermilab**  
**FY2002 Self-assessment**  
**Process Assessment Report**  
**For**  
**Division/Section:** Particle Physics Division  
**Date:** October 2, 2002

Division/Section performing assessment

Particle Physics Division (PPD)

Name of organization that owns assessed process

PPD Theoretical Physics Department

Organization Strategy

Theoretical Physics Department seeks to appoint good Research Associates in order to optimize the effort in theoretical physics.

Names of Personnel on Assessment team

Keith Ellis and Elizabeth May

Name of process assessed

Theoretical Physics Department Research Associate Hiring.

Brief description of process to be assessed

In the fall of each year the Theoretical Physics Department advertises to hire Research Associates for three-year positions to staff its approved level of effort in theoretical physics. The applications are sorted, and examined by the senior staff of the department. In January, decisions are made by the senior staff of the department. The process continues until all positions are filled.

1. Are metrics associated with this process? If so, what are they?

Metrics are provided a posteriori by

Indicator 1: The percentage of Research Associates in obtaining scientific appointments elsewhere.

0-20%	21-40%	41-60%	61-80%	81-100%
Unsatisfactory	Marginal	Good	Excellent	Outstanding

Indicator 2: The percentage of women and minorities hired over a three year period.

0%	1-10%	11- 20%	21- 49%	50% <
Unsatisfactory	Marginal	Good	Excellent	Outstanding

Indicator 3: Construction of a web page advertising the position.

No	Yes
Marginal	Excellent

Overall assessment will be a simple average of these three indicators.

2. What are the names of the procedures associated with this process?

There is no written procedure of this process.

3. Are these procedures being followed? Are they current?

N/A

4. Describe the methodology used to assess this process.

We looked at the record of the applications, offers, and acceptances. The records of the departing research associates give a good indication of the success of our hiring. We review the positions obtained by the departing Research Associates. The record of departing Research Associates also allows us to assess our achievement of opportunity goals, which is hard to do during the hiring process since no record of minority status is currently kept.

5. Results of the assessment:

a. *Are the existing process controls adequate?*

Yes

b. *Have any notable practices been identified?*

Yes. We respond promptly to the applications within ten business days as a matter of common courtesy.

c. *Have any major deficiencies been identified?*

Yes.

1. No written procedure to describe this process. A possible procedure could be:

1. Advertise Position
2. Receive, sort, and respond to applications
3. Create database of applicants recording minority status of applicants when provided
4. Review research areas in which we wish to hire
5. Examine complete application for each candidate
6. Prepare short list of top candidates
7. Perform final choice of candidates
8. Assess whether our equal opportunity goals are being met to prepare for the following year.
9. Record the percentages of acceptances
10. Keep track of positions obtained by departing RA's

2. Since minority status is not required on the application it is difficult to monitor our fulfillment of our diversity goal.

d. *Is the process working effectively? What improvements can be made?*

Yes. The process would be improved if we add a review of our fulfillment of diversity goals.

e. *How does current performance compare to last assessment, other similar labs, industry?*

N/A

f. *What are the results for the metrics?*

1. Indicator 1: For the year 2002 the result was that 75% of our leaving Research Associates found academic positions. See Tables 1 and 2. By the metric established above, the grade is Excellent

2. Indicator 2: For the years 1998 – 2002 there were three women hired out of 14 appointments. See Table 4. By the metric established above, the grade is Excellent.

3. Indicator 3: The Web page was constructed. The URL is <http://theory.fnal.gov/people/ellis/positions.html>. By the metric established above, the grade is Excellent.

g. *Adjectival grade achieved.*

Excellent

Identified opportunities for improvement

1. Inclusion of minority status in the database where provided.
2. Conduct formal review of achievement of equal opportunity goals after the hiring is completed.

Schedule for implementation of improvements

Improvements will be made in this hiring cycle before March 2003.

Status of improvements from previous assessment

N/A

Attachments (supporting data, worksheets, reports, etc.)

See below.

**Table 1****Departing Research Associate Profile**

Year Left	Total # leaving	Currently Tenured Faculty	Currently Junior Faculty	Currently Post Doc	Other Employment	Female	Hispanic	Other Minorities
2002	4	0	1	2	1	2	0	0
2001	3	1	0	2	0	0	0	0
2000	3	0	3	0	0	0	0	0
1999	3	1	0	1	1	1	0	0
1998	3	2	0	0	1	1	0	0
1997	4	0	4	0	0	2	0	0
1996	6	2	0	1	3	0	1	0
1995	2	0	0	1	1	0	0	0
1994	1	1	0	0	0	0	0	0
1993	5	0	3	1	1	1	1	0

Table 1 shows the disposition of Research Associates leaving the department.

Table 2 below records the percentage going on to a scientific appointment elsewhere as a function of the date of leaving the department.

**Table 2**

Year Left	Percentage of Research Associates in Scientific Employment
2002	75
2001	100
2000	100
1999	66
1998	66
1997	100
1996	50
1995	50
1994	100
1993	80

Table 3 shows the percentage of female Research Associates as a function of the year of leaving.

**Table 3**

<b>Year Left</b>	<b>Percentage of Female Research Associates</b>	<b>Percentage of Minority Research Associates</b>
2002	50	0
2001	0	0
2000	0	0
1999	33	0
1998	33	0
1997	50	0
1996	0	17
1995	0	0
1994	0	0
1993	20	20

**Table 4**

<b>Year Hired</b>	<b>Female</b>	<b>Male</b>	<b>Minorities</b>
2002	0	5	0
2001	0	2	0
2000	1	2	0
1999	2	2	0
1998	0	2	0
1997	0	3	0
1996	1	2	0
1995	1	2	0
1994	2	2	0
1993	0	4	1