



---

Managed by Fermi Research Alliance, LLC for the U.S. Department of Energy Office of Science

---

## **Post-doc Mentoring**

Minerba Betancourt and Bo Jayatilaka

SAC meeting

April 19, 2021

# Overview

- SAC has been discussing mentoring at Fermilab
- Last year we heard from CMS and neutrino divisions post-doc mentoring programs <https://indico.fnal.gov/event/24364/>
- Extremely successful programs
- From the CMS post-doc mentoring program



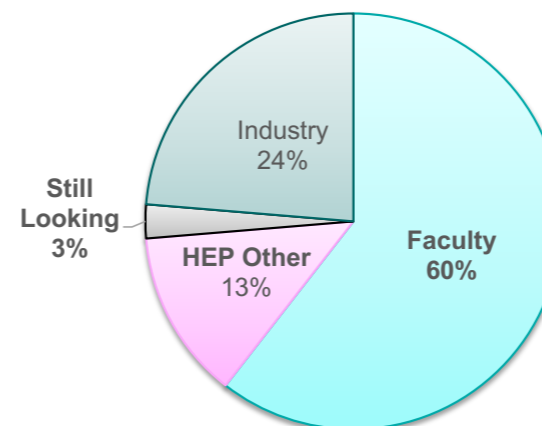
## CMS Postdoc Placement



- Majority of CMS department postdocs have found faculty positions

- ➔ 38 RAs have completed their postdoctoral research on CMS
- ➔ 23 found a tenure track position in HEP at a university (15) or lab (8): 60%
  - ➔ Compared to 20% of physics postdocs (APS)
- ➔ 5 went on to a second postdoc or other position in HEP (one had that goal): 13%
- ➔ 9 got a job in private industry: 24%
- ➔ 1 still looking: 3%

CMS RA Next Position



- We have different mentoring programs across the different divisions/departments, some divisions do not have any post-doc mentoring program

# Post-doc Mentoring Program at CMS

---

- Every postdoc has a mentoring team of scientists
  - Chosen by the postdoc to support their career and research
- Postdoc pizza meetings
  - Each postdoc shares their research strategy annually with the CMS department
  - Two high quality talks per meeting of postdoc accomplishments and plans
  - Exiting postdocs brief their colleagues on their experience on the job market
- Mentoring committee meetings:
  - Quarterly meetings gets reports from supervisors on postdocs
  - Committee reviews progress, advises teams, holds team accountable
- Performance reviews
  - Includes the postdoc, their team, and management, for this annual review
  - Focuses on mentoring aspects: visibility, conferences, publications, references
  - Focus on the future as much as possible, in addition to reviewing performance
  - Prepare the postdoc to enter the job market as early as possible
- More details at: <https://indico.fnal.gov/event/24364/contributions/76356/attachments/127879/154457/CMS-RA-Mentoring-SAC-2020.pdf>

# Post-doc Mentoring Program at CMS

- CMS has a guidelines documents for CMS RA supervisors and mentors <https://cd-docdb.fnal.gov/cgi-bin/sso/RetrieveFile?docid=5695&filename=FNAL-CMS-RA-Mentoring-Guidelines.pdf&version=2>



# Post-doc Mentoring Program at Neutrino Division

---

- Each postdoc in ND is assigned a supervisor and two mentors
  - This is the team that follows the postdoc throughout the duration of their position at the lab
  - Mentors are often not on the same experiment as the post-doc and/or not in the postdoc's field of research
- Postdoc is required to meet with their mentor team every January
  - Postdoc presents what they have accomplished and their upcoming plans
  - New postdocs must have their first meeting with mentors and ND division head
- Division head and deputy division head meet monthly with all ND postdocs
- More details at: <https://indico.fnal.gov/event/24364/contributions/76358/attachments/127883/154467/zeller-ND-RA-mentoring-050420.pdf>
- ND has an expectations document for supervisors of postdocs: [https://fermipoint.fnal.gov/org/ocro/neutrino/\\_layouts/15/WopiFrame.aspx?sourcedoc=%7B19DEFB7C-0A6D-47FA-8F05-5A11B5BB9545%7D&file=PostdocSupervisorGuide.docx&action=default&lsList=1&ListId=%7BD6C69065F-C7DA-4001-8A51-9092CB7BFEC7%7D&ListItemId=10](https://fermipoint.fnal.gov/org/ocro/neutrino/_layouts/15/WopiFrame.aspx?sourcedoc=%7B19DEFB7C-0A6D-47FA-8F05-5A11B5BB9545%7D&file=PostdocSupervisorGuide.docx&action=default&lsList=1&ListId=%7BD6C69065F-C7DA-4001-8A51-9092CB7BFEC7%7D&ListItemId=10)

# Post-doc Mentoring Follow up

---

- The CMS and Neutrino Division mentoring programs have been very successful
- It would be amazing to have more divisions commit to expanding their current postdoc mentoring programs
- We reached the division heads and asked
  - Would your division be interested in expanding any existent post-doc mentoring program?
- **We got positive feedback from all divisions**
- Some divisions already have post-doc mentoring programs, for example
  - Astrophysics has a mentoring program for post-docs based loosely on the CMS and the neutrino model
  - Theory department has a mentoring program for post-doc and Associate scientists. In this program each junior member is paired with a senior staff member. The mentor is meant to give advice about issues at work, career advancement opportunities, and anything else related to Fermilab or science in general
  - SCD has a post-doc program based on CMS program (can be thought of as a “lightweight” version of the CMS program)

# Discussion about wide-lab Mentoring Guidelines

---

- Goal is to recommend a wide-lab mentoring guidelines to the directorate
  - Divisions with successful mentoring programs will keep their programs
  - Expand current mentoring programs that could be improved
  - Create postdoc mentoring guidelines to divisions/departments that do not have them
    - A committee with members from all divisions could be created to write general guidelines
- We would like to hear feedback from SAC members
- Current focus is on postdocs but mentoring guidelines for other scientific jobs (esp. associate scientists) would be helpful to many
  - SAC could contribute to these as well