Guidelines for Proposing to Continue TECI Mini-Project Work

The 2018-2019 TECI Program extends opportunities to early-career scientists and engineers to deepen their involvement with the Thirty Meter Telescope by collaborating on “Mini-Projects:” small projects informing specific case studies or problems of interest to the TMT Project Office, instrument teams, and the broader TMT community. Mini-Projects are planned and executed by teams of TECI participants and span the full spectrum of science and technology areas.

Teams who wish to continue working on TECI Mini-Projects after the 2018 TECI workshop for the 2018-2019 TECI Program are required to submit a TECI Mini-Project Proposal to the TECI Program Coordinators (information on submission can be found within the proposal). The deadline for TECI Mini-Project proposals is Friday, February 22, 2019.

The TECI Mini-Project Proposal is attached to this email, and available in the “TMT Early Career Initiative Workshop - File Sharing 2018” Google Team Drive.

A majority of the proposal is to be completed collaboratively by the Mini-Project team, but there are also questions to be filled out by each individual team member.

Approval of TECI Mini-Project proposals to continue working remotely will be based on the strength of the following criteria:

Benefits to participants
1. Develops participants’ international collaboration skills
2. Supports participants’ work at their home institutions
3. Makes use the expertise and strengths of each individual team member
4. Strengthens connections between participants and TMT project

Benefits to TIO
1. Enhances international collaborations, especially within the partnership
2. Creates a finite product of value to TMT project

Merits of Project Approach
1. Strength of the proposed approach
2. Value added by team approach (as opposed to individual work)
3. Feasibility of project timeline

If your team’s TECI Mini-Project proposal is approved, the following will be required for project work to begin:
1. Project consultant’s availability and approval
2. Participants’ advisors’/supervisors’ approval
3. Travel budget (if travel is proposed, see below)
If your team envisions that your project will involve an in-person visit for some or all of your team members to a TMT site, you must complete an additional travel request (a detailed travel request form will be available soon and due at a later date).

Approval of travel requests for an in-person visit will be based on the strength of the following criteria:

1. Value of in-person visit toward completing project
2. Opportunities for networking at site, and connection between project work and networking opportunities
3. Institutional resources available for visit, enhancing travel support requested from TECI
4. Individuals’ ability to travel (passport/visa status, schedule availability, etc.)

TECI projects convey several benefits to early-career scientists and engineers pursuing them:

**Leadership and Technical Experience**
- Define the scope, timeline, and resources to complete the project
- Organize and work on a small international team
- Apply technical expertise toward completing project

**International Collaboration**
- Engage with the TMT Project Office, a TMT instrument team, or other TMT partner institutions
- Continue collaborating with early-career engineers/scientists from other TMT partners
- Possibility of visiting a TMT site (Project Office or partner institution)

**Recognition**
- Project teams will be highlighted on TECI program webpage
- Project can result in various forms of recognition within TMT and the broader astronomy/instrumentation community

**Mini-Project timing and structure**
At the 2018 TECI workshop, participants formed international teams and began working on a range of Mini-Projects, and at the end of the workshop identified potential avenues and next steps for continuation. Participant teams who wish to complete their project in 2019 will submit an application describing the work plan and resources required. TECI requires supervisor/advisor support for participants continuing to work on Mini-Projects beyond the 2018 TECI workshop. TECI Program Managers will coordinate with relevant TMT Project Office or instrument team members to ensure their availability to consult with the team and receive their final products.
Individual time spent on a Mini-Project will vary from team to team. Each team’s proposal will include an estimate of time required, which advisors/supervisors will need to approve before project work begins.

**TECI support for participants and projects**
TECI pairs approved Mini-Project teams with consultants from TMT, and provides infrastructure for documenting Mini-Project progress and outcomes. Teams may also apply for limited TECI funding to support travel to a TMT site. Mini-Projects are intended as part-time work, and TECI cannot offer a stipend or salary support for participants.

**2018/2019 Mini-Project Consultants**
Warren Skidmore, TMT Telescope Research Scientist  
Jessica Lu, TMT IRIS  
Mike Fitzgerald, TMT Planetary Systems Imager co-lead  
Kevin Bundy, TMT WFOS Principal Investigator  
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Renate Kupke, TMT WFOS Senior Optical Designer  
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**Organization and Contact Info**
TECI is led by the [Institute for Scientist & Engineer Educators](http://www.ucsc.edu) at the University of California, Santa Cruz and is funded by the Thirty Meter Telescope International Observatory.

For questions about Mini-Projects’ content or expectations, please contact TECI Program Managers:  
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