

**Jefferson Science Associates, LLC**  
Managing and Operating the Thomas Jefferson National Accelerator Facility  
for the U.S. Department of Energy

**FY2018 JSA Initiatives Fund Proposal Summary Sheet**

**Proposal title**

**Project Start Date** (month/year)

**Project End Date** (month/year)

New  
proposal

Renewal

**Total funds  
requested**

Total leveraged support / matching  
funds. Details of funds must be  
included in budget proposal.

**To be completed by JSA: Total funds awarded**

**Principal Investigator (PI)**

Institutional affiliation  
Mailing address  
Email / phone #

Co-PI (if more than 1, add  
pages with information)

Institutional affiliation  
Mailing address  
Email / phone #

**Check one category:** If PI is a Lab employee, your identification of the appropriate Associate Director below represents the acknowledgement of that AD with your submittal of proposal. No signature required.

Lab employee: Identify Associate Director (email /  
phone)

Lab user: Identify University affiliation (email / phone)  
Joint appointee: identify University and Lab division  
association (email / phone)

Other: Identify Institutional affiliation (email /  
phone)

**Proposal: Attach file with**

- (1) **Executive summary and technical proposal**
- (2) **Synopsis of scientific, educational, technical, and/or business merits, and alignment with and significance to Lab's current program**
- (3) **Proposed evaluation plan to measure success.** If this is a request for renewal of funds, assessment of prior year performance,

Your proposal may include letters of endorsement and other supporting information (maximum of 12 pages including this summary sheet and budget sheet)

# Budget Proposal

**Proposal Title**

**Principal Investigator (PI)**

**Total funds requested**

**To be completed by JSA: Total funds awarded**

	Item Description		Amount
<p><b>Equipment.</b> Lab users submitting proposals that include equipment to be used at the Lab must review with the appropriate Lab Associate Director. The provision of the name of the AD below represents the AD's acknowledgement. <b>No signature required.</b></p>			
	Associate Director: _____		
	_____	_____	
	_____	_____	
		Subtotal Equipment	
<p><b>Travel Support.</b> Provide break-out of estimates for registration fees, lodging and transportation, catering, and facility charges (room rentals, AV equipment; etc.)</p>			
	_____	_____	
	_____	_____	
	_____	_____	
		Subtotal Travel	
<p><b>Supplies</b></p>			
	_____	_____	
	_____	_____	
		Subtotal Supplies	
<p><b>Consultants/Subcontracts</b></p>			
	_____	_____	
	_____	_____	
		Subtotal Consultants/Subcontracts	
<p><b>Other Expenses.</b> Examples include stipends and honoraria, prizes, awards.</p>			
	_____	_____	
	_____	_____	
		Subtotal Other Expenses	
		<b>Total Budget Proposal</b>	

**Budget Justification:** Include narrative to explain need for each line item in the budget, showing breakdown of calculations used to arrive at the amount in each line of the budget. Note that the JSA Initiatives Fund Program does not support salaries and salary-related expenses, or indirect expenses.

**Leveraged Support/Matching Funds information.** Identify the source, type and amount of dollar funds from each institution. Include **separately** estimated value of in-kind support. Your identification of the authorized representative who has committed institutional support for your proposal represents the acknowledgement of that individual. If support or funds are provided by the Lab, identify the associate director (or equivalent) as the authorized representative. Information may be included on separate page.

EXECUTIVE SUMMARY:

The Users Group Board of Directors requests funds to support the student prizes that have been awarded for the past several years, supported by the JSA fund, and previously by SURA. The money requested will support the thesis and poster prizes to be awarded at the planned 2018 User Group Meeting. In addition to the prize money for the poster prizes, we request funds to help support travel of all three poster prize winners to a meeting of their choice, where they can present their poster or a talk on their work.

SYNOPSIS:

The thesis and poster prizes provide our students with an additional stimulus to excel, a motivation to learn how to explain their work well, and support to help them succeed professionally. They also provide the User Group and the laboratory with a mechanism to recognize, reward, and honor our finest students, and thus clearly support the laboratory's scientific mission.

EVALUATION PLAN:

The primary sign of success of past thesis and poster competition is the extremely high quality of both the theses and the posters that were submitted, which impressed the judges in both cases. Meeting attendees also commented positively on the posters. With travel support, we hope to give the winners the opportunity to present their work more broadly and to attend conferences or meetings that will be beneficial to their education.

Many of the previous thesis prize winners are still actively involved in the field, and several earlier prize winners now hold permanent positions as faculty or staff working on JLab physics or in related areas. We will continue to monitor the success of our prize winners and the overall quality of submissions. We also believe that the publicity from these prizes reflects very positively on Jefferson Lab.

SUPPORTING INFORMATION

THESIS PRIZE:

The thesis prize gives us the opportunity to recognize the contributions of our finest graduate students, and to help them launch their early careers. Indeed, some prize winners now have staff positions at national laboratories or faculty positions at universities, and recent prize winners are in postdoctoral positions. The thesis prize is a valuable program that deserves the continued support of the JSA Initiatives Fund. The User Group Board is thankful for the past support, and requests continued support for the finest graduate students. After several years of no increases, we propose to maintain the thesis prize at \$2500.

The following table gives an indication of the success of our previous thesis prize winners. Note that among our past 13 winners, six have permanent positions and five of those are involved in physics related to Jefferson Lab (Cloet, Ron, Sokhan, Puckett, and Williams), joining several previous winners who are still actively involved at Jefferson Lab (including Ioana Niculescu, David Gaskell, Xiaochao Zheng, Karl Slifer, and Carlos Munoz Camacho).

<b><i>Year</i></b>	<b><i>Recipient</i></b>	<b><i>Current status</i></b>
2017	Priyashree Roy	Postdoc at University of Michigan

2016	Or Hen	Pappalardo Fellow, MIT
2015	Adesh Subedi	Postdoc at Indiana University
2015	Cristiano Fanelli	Postdoc at MIT
2014	Rakitha Beminiwattha	Postdoc at Syracuse University
2013	Katherine (Myers) Mesick *	Postdoc at Los Alamos
2012	<i>Biplab Dey</i>	Postdoc at INFN, Sezione di Milano
2011	Xin Qian	Associate Physicist, Brookhaven National Lab
2010	Andrew Puckett	Asst. Professor, U. of Connecticut
2009	Daria Sokhan	Lecturer in Nuclear Physics, U. Glasgow
2008	Guy Ron	Associate Prof., Hebrew University of Jerusalem
2007	Michael Williams	Asst. Professor, MIT
2007	Ian Cloet	Staff Scientist, Argonne National Lab

\* = Also awarded the 2014 APS Dissertation Award in Nuclear Physics

We had four outstanding thesis prize submissions, three written in English and one in French. Conflict of interest with the UGBoD reading French complicated the selection of the panel. A panel of 9 (3 French readers) unanimously selected a winner at the end of a tight competition.

#### POSTER COMPETITION:

For the past few years, the fund has also supported the Student Poster Competition at the annual Users Meeting. This program exists to reward and recognize our current students, to encourage attendance at the User Group Meeting, to encourage the students to develop their communication abilities at outreach, and to make a positive impression on visitors to the annual meeting. It has been quite successful in fulfilling these goals; the impression of excitement we have conveyed to the funding agencies has been particularly beneficial, as we always schedule the poster competition during the reception on the first day of the annual meeting.

The 2017 competition was judged by four senior Jefferson Lab Users who, once again, found it very difficult to decide on the 3 best posters. The first prize went to theorist Ishara Fernando from Hampton University for his poster on "Baryon masses in ChPT combined with the  $1=N_c$  expansion", the second prize went to experimentalist Shuang Han of Wuhan University with her poster on "Survey of the  $4\gamma$  final state", and the third prize went to an accelerator student, Salvador Sosa of Old Dominion University, for his poster on "Modeling Local Crabbing Dynamics in the JLEIC Ion Collider Ring".

We ask for first, second and third prize money of \$500, \$250 and \$100, which is approximately half of the award given in previous years. In addition, we provide \$500 in travel support to help the winners attend a meeting of their choice where they can present their work (as a poster, talk, or in informal discussions, depending on the nature of the meetings). This will help them gain additional exposure and get a better idea of the broader nuclear physics program. It will also help Jefferson Lab show off some of our best students who, without the financial support, may have difficulty in attending such meetings.