

<b>Project Name:</b>		
OBS11-001: New High-Resolution Optical Spectrograph		
<b>Business objective served by this project</b>		
Provide new, in demand, instrumentation for Gemini telescopes		
<b>Project Manager/Leader:</b>	<b>Project Sponsor:</b>	<b>PDS Version/Date:</b>
Scot Kleinman	Eric Tollestrup	V1 20Oct10

## Project Description

### Issue Statement:

The goal of this project is to deliver to the Gemini user community a new, fully commissioned, high resolution, optical spectrograph. Such an instrument has been in demand by the Gemini users and is endorsed by the GSC as our next instrument.

### Project Objective Statement (POS):

- Deliver a new high resolution optical spectrograph to the Gemini community that serves their scientific needs
- Develop an instrument that has a focused scope so that schedule and cost can be contained
- Produce an instrument in a visibly new model at Gemini that establishes an effective partnership between all relevant divisions of Gemini with each other and the vendor
- Produce an instrument that is facility class immediately after arrival, testing, verification, and commissioning

### Project Flexibility:

Flexibility Matrix	Least Flexible	Moderately Flexible	Most Flexible
Scope			X
Schedule		X	
Resources	X		

### Major Deliverables:

- Updated and new ICDs for instrument procurement
- A new model for instrument procurement
- One high resolution optical spectrograph fully integrated into the Gemini environment for normal community use

### Assumptions:

- I assume we will have final board approval and an appropriate budget for this project
- I am assuming a “traditional” instrument procurement strategy will be employed

**IS and IS NOT:**

- **IS:** the first new instrument to be delivered under the new OBS project structure
- **IS:** going to provide relevant new and updated ICDs
- **IS NOT:** going to repeat mistakes of the past
- **IS NOT:** going to revise or produce new ICDs that do are not directly relevant to this instrument's requirements

**Strategy and Resources**

**Milestones and Stages:**

Define and describe a set of milestones for the project, also define stages that can be used later as off ramp points.

See project Plan and Stages and Stage Definitions Documents in PI

- Stage 1 Instrument Science Requirements
  - Science req. and strawman cost ready for Board
- Stage 2 Instrument and Infrastructure Requirements
  - Revise relevant old ICDs
  - Produce relevant new ICDs
  - Produce Instrument Reqs. from Science Reqs.
- Stage 3 Request for Proposals
  - FedBizOps
  - RfP
  - Review and DownSelect
  - Contract(s) signed
- Stages 4-N in later years

**Estimated Costs:**

- Instrument costs to be developed in stages 1-3
- Gemini Resources for 2010 through Feb 2012 in PI: 5,026hr

**Core Team Members(see Guidelines for Developing New Projects document):**

- **Project Manager:** Scot Kleinman
- **Project Scientist:** Steve Margheim
- **Systems Engineer:** Brian Walls

**Extended Core Team Members:**

- Andy Flach
- Craig Allen
- Eric Tollestrup
- Gelys Trancho
- Kathleen Labrie
- Kevin Hanna
- Rodrigo Sandoval

- #SSA
- #Astronomer(s)
- #Electrical Engineer
- #Optical Engineer
- #SWHL Engineer

**Dependencies that require coordination:**

**Risks and Issues:**

- The board may not approve the funding
- The approved funding may not be enough
- The instrument really desired by our community may not be feasible for resource or technological reasons

**Supplemental Resources:**

- Willing partners to design and build the instrument