

The DOE Project Leadership Institute

Briefing for the High Energy Physics Advisory Panel
June 6, 2017

Benjamin L. Brown, Ph.D.

ESnet Program Manager and Senior Science and Technology Advisor
DOE Office of Science



Developing a Diverse Network of Talented DOE Project Professionals



DOE Project Leadership Institute (PLI)

What

A new program created to connect and develop project leaders across the DOE complex; results in a formal certificate

When

Annual cycle
Year-long commitment by participants
Each year a new cohort

Who

Contractor project professionals
Federal Project Directors
Federal Program Managers

Where

Not a physical place – the PLI is for all of DOE

Why do we need a PLI program?

DOE project management performance depends on:

- Collective learning and shared commitment
- Workforce development
- Knowledge management



Projects are consistently among our highest risk activities

“Program Management Improvement Accountability Act”
P.L. 114-264, signed into law
Dec. 14, 2016

Project Management is a vibrant professional discipline



[HOME](#) [ABOUT](#) [JOIN PMI](#) [CONTACT](#)

[LOG IN](#) [REGISTER](#)

Search



[myPMI](#) [Certifications](#) [Membership](#) [Learning](#) [Events](#) [Business & Government](#) [PMBOK® Guide & Standards](#) [Store](#)

Certifications »

[Certification Process](#)

[Maintain Certification](#)

[Certification Registry](#)

[Certification FAQs](#)

Certification Types

[Project Management Professional \(PMP\)®](#)

[Portfolio Management Professional \(PfMP\)®](#)

[PMI Agile Certified Practitioner \(PMI-ACP\)®](#)

[PMI Professional in Business Analysis \(PMI-PBA\)®](#)

[Program Management Professional \(PgMP\)®](#)

[Certified Associate in Project Management \(CAPM\)®](#)

[PMI Risk Management Professional \(PMI-RMP\)®](#)

[PMI Scheduling Professional \(PMI-SP\)®](#)

Apply Now

[Report PDUs on CCRS](#)



Project Management is a vibrant professional discipline



The Knowledge Leader for Project Success
Owners • Contractors • Academics

LOG IN

Site Registration

GO

HOME ABOUT CII MEMBERS BEST PRACTICES EVENTS GROUPS SERVICES STORE

Industry Sectors | Funded Studies | Implementation | Professional Development | Performance Assessment

About CII

Best Practices
Membership
Staff Directory
FAQ
CII Awards
Media Center
CII Videos

CII Home

About CII

The Construction Industry Institute, based at The University of Texas at Austin, is a consortium of more than 130 leading owner, engineering-contractor, and supplier firms from both the public and private arenas. These organizations have joined together to enhance the business effectiveness and sustainability of the capital facility life cycle through CII research, related initiatives, and industry alliances. A learning organization with a wealth of knowledge and information, CII is unique in the engineering and construction industry.

The following webpages and PDF files outline the basic facts about CII:

CII Vision
and Mission



Director



2017
CII Chair

Next Gen CII
Governance Plan



Annual
Report



Organization
Chart

Last modified and verified on 1-19-16 by The CII Webmaster

The DOE Project Management Community



The screenshot shows the top navigation bar of the DOE Project Management Oversight & Assessments website. The header includes the DOE logo, the office name, and navigation links for 'About Us', 'SERVICES', 'DIRECTIVES', and 'MISSION'. Below the navigation bar, a large green banner features the title '2017 DOE Project Management Workshop'. Underneath the banner, a white content box contains a breadcrumb trail, a sub-header, a detailed paragraph about the workshop, and a call to action to download presentations.

Office of
PROJECT MANAGEMENT OVERSIGHT & ASSESSMENTS

About Us

SERVICES

DIRECTIVES

MISSION

SERVICES

2017 DOE Project Management Workshop

[Home](#) » [Services](#) » 2017 DOE Project Management Workshop

Project Management Workshop

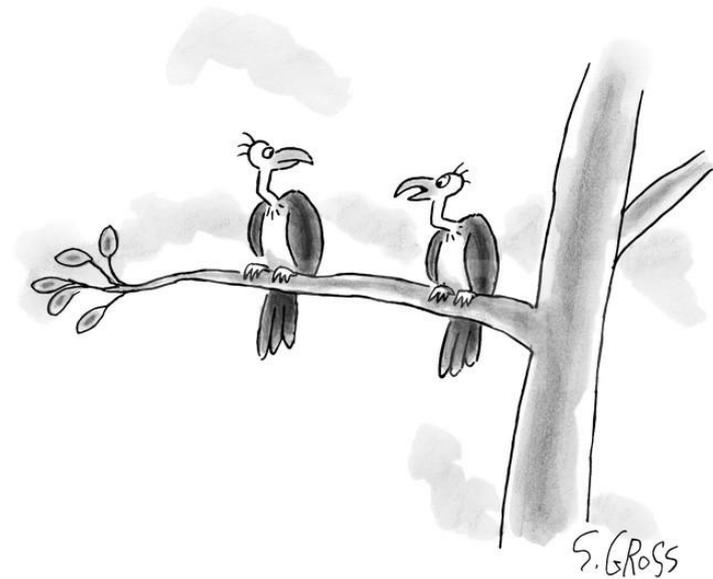
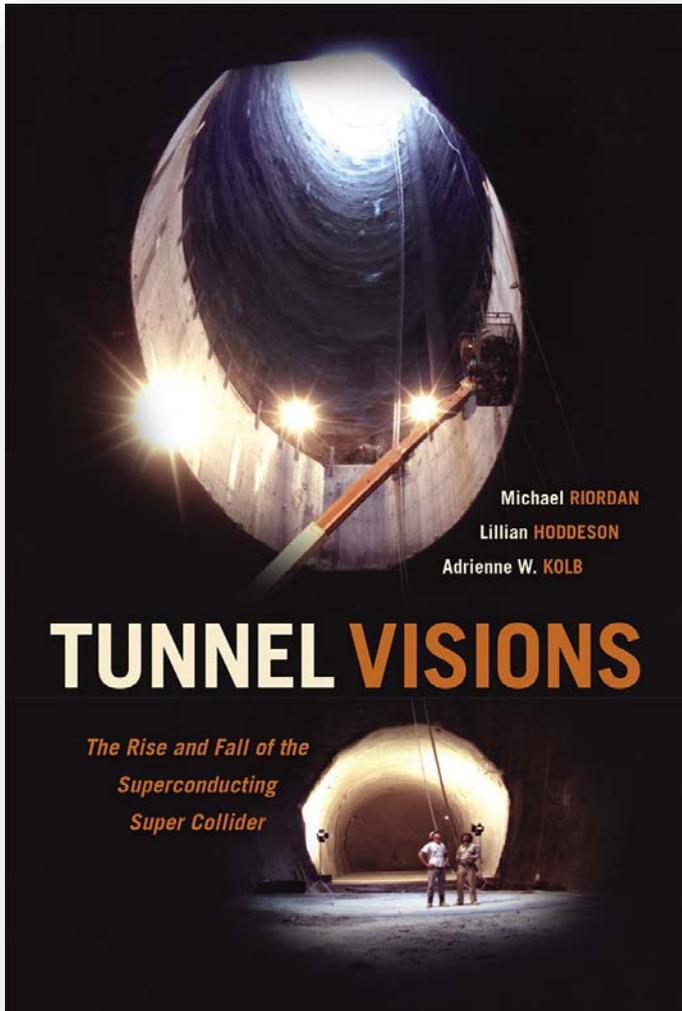
DOE's Office of Project Management Oversight and Assessments (PM) conducted the 2017 Project Management Workshop and an associated Project Controls Session on March 21-23, 2017. The Workshop was conducted in Arlington, VA, and continues the tradition of providing opportunities to discuss projects and project challenges with senior leadership, to share lessons learned, and to recognize excellence. The agenda for the Workshop is available [here](#), and short biographies of the speakers can be viewed [here](#).

Download the presentations from the Project Management Workshop below.

The SC Project Management Community



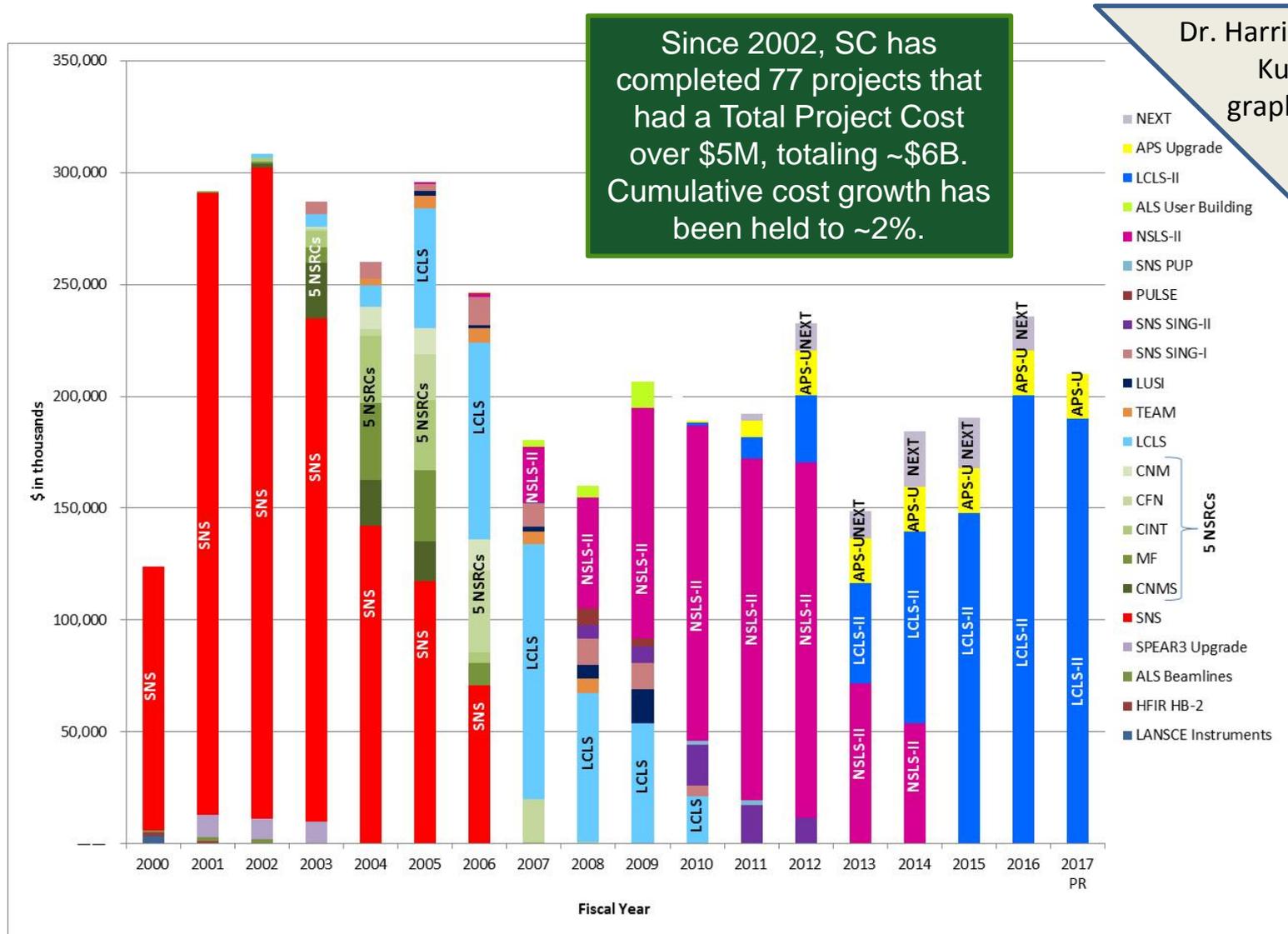
We have a shared history



"Promise me that if I die first you won't eat me."

Copyright Sam Gross/Conde Nast publishing

We have a shared fate



Why do we need a PLI program?

DOE project management performance depends on:

- Collective learning and shared commitment
- Workforce development
- Knowledge management

PLI Origins

On December 1, 2014, Secretary of Energy Ernest Moniz signed a memorandum, *Improving the Department's Management of Projects*, which introduced several new initiatives, including:

“The Department will establish a project leadership institute to create and sustain a culture of project delivery excellence.”

Steve Meador, Director of the SC Office of Project Assessment, volunteered to develop the program concept.

The PLI is differentiated from other programs

- DOE Project Management Career Development Program (PMCDP)
https://powerpedia.energy.gov/wiki/Project_Management_Career_Development_Program
- Project Management Institute (PMI) Project Management Professional (PMP) certificate
<http://www.pmi.org/certifications/types/project-management-pmp>
- Federal Executive Institute Leadership for a Democratic Society

PLI program development unfolded over two years

Jan – Aug 2015



SC proposed a pilot program.

Aug 2015



SC approved and funded the pilot program.

Oct 2015 – Dec 2016



SC led program planning and launch.

2017
Inaugural
Cohort

The program concept was reviewed and endorsed by then Secretary of Energy Moniz and other senior DOE leaders.

PLI Planning Team



Project Leadership Institute Meeting
February 2-3, 2016

In-person meetings

November 2015 (FNAL)
February 2016 (SLAC)
April 2016 (ASU)
June 2016 (Tysons, VA)
August 2016 (CU-Boulder)
September 2016 (SLAC)
November 2016 (SLAC)

Top (L to R)

Keith Molenaar, CU-Boulder
Ben Brown, SC
Mark Reichenadter, SLAC
Edd Gibson, ASU
Buddy Bland, ORNL

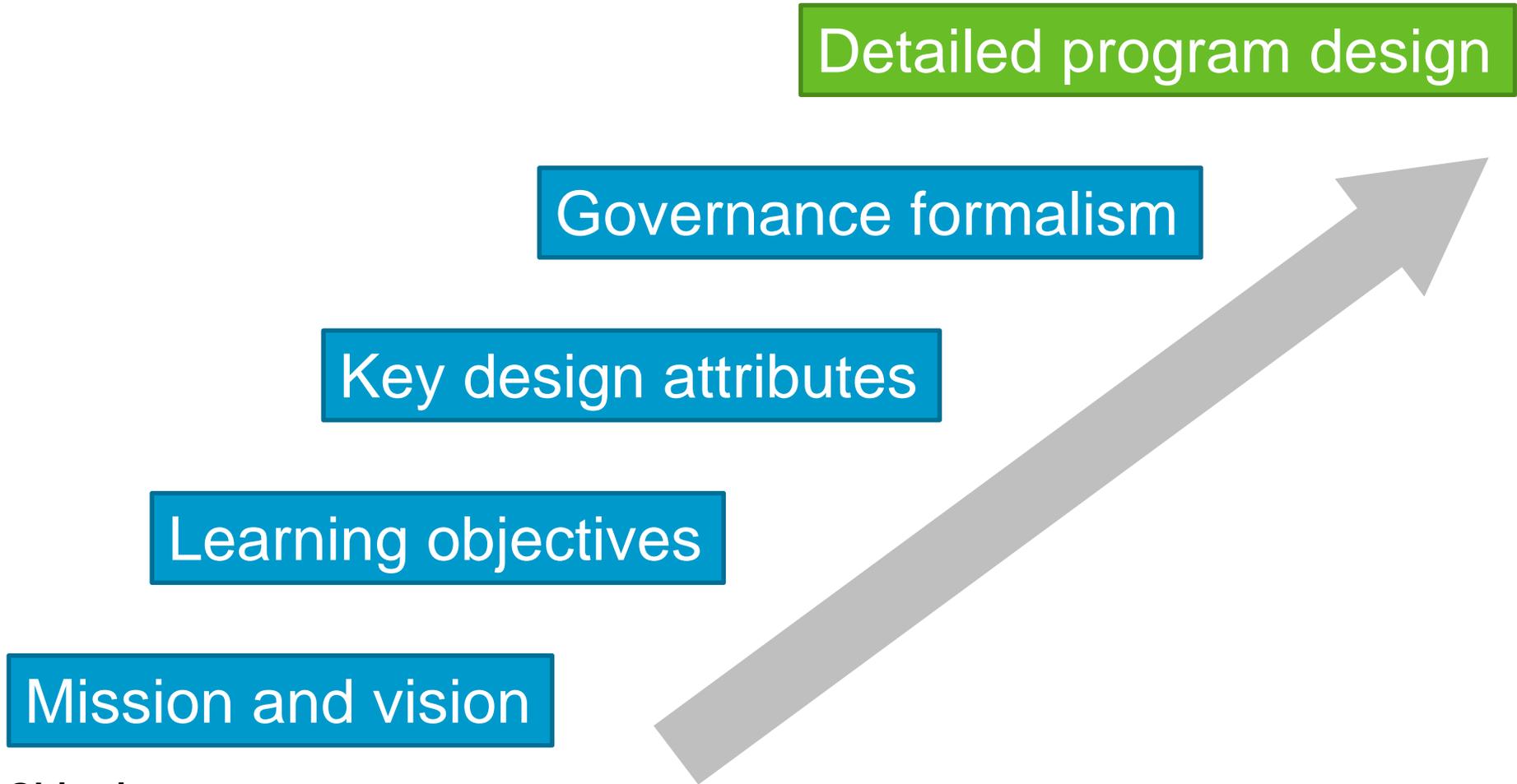
Bottom (L to R)

Jim Krupnick, LBNL (ret.)
Les Price, ORNL (ret.)
Dianne Hatton, BNL
Ann Baker, GMU (ret.)
Steve Meador, SC

Not pictured

Thomas Glasmacher, MSU

PLI program planning progressed through milestones



Objective

Create a prestigious, transformational professional development experience that is simultaneously both a leadership development and project delivery course of study and practice, tailored to the DOE context.

Mission



- The mission of the U.S. Department of Energy (DOE) Project Leadership Institute (PLI) program is to cultivate a diverse network of successful DOE project delivery practitioners—those capable of delivering major high-risk projects.
- The PLI program participants will contribute to building a culture of project management excellence across DOE.

Learning Objectives

Strategic Thinking/Analysis

- S1: Demonstrating personal, group, lab, and organization awareness and savvy to effectively anticipate opportunities and problems early
- S2: Anticipating and managing project risks through rigorous analytical methods
- S3: Negotiating equitable partnering arrangements and contracts
- S4: Analyzing project data, information, indicators and trends

Organization and General Management Skills

- O1: Exercising resiliency in challenging management scenarios
- O2: Demonstrating personal organization and time management, including delegating authority appropriately
- O3: Developing and implementing effective change management process
- O4: Recommending and critiquing front-end planning procedures

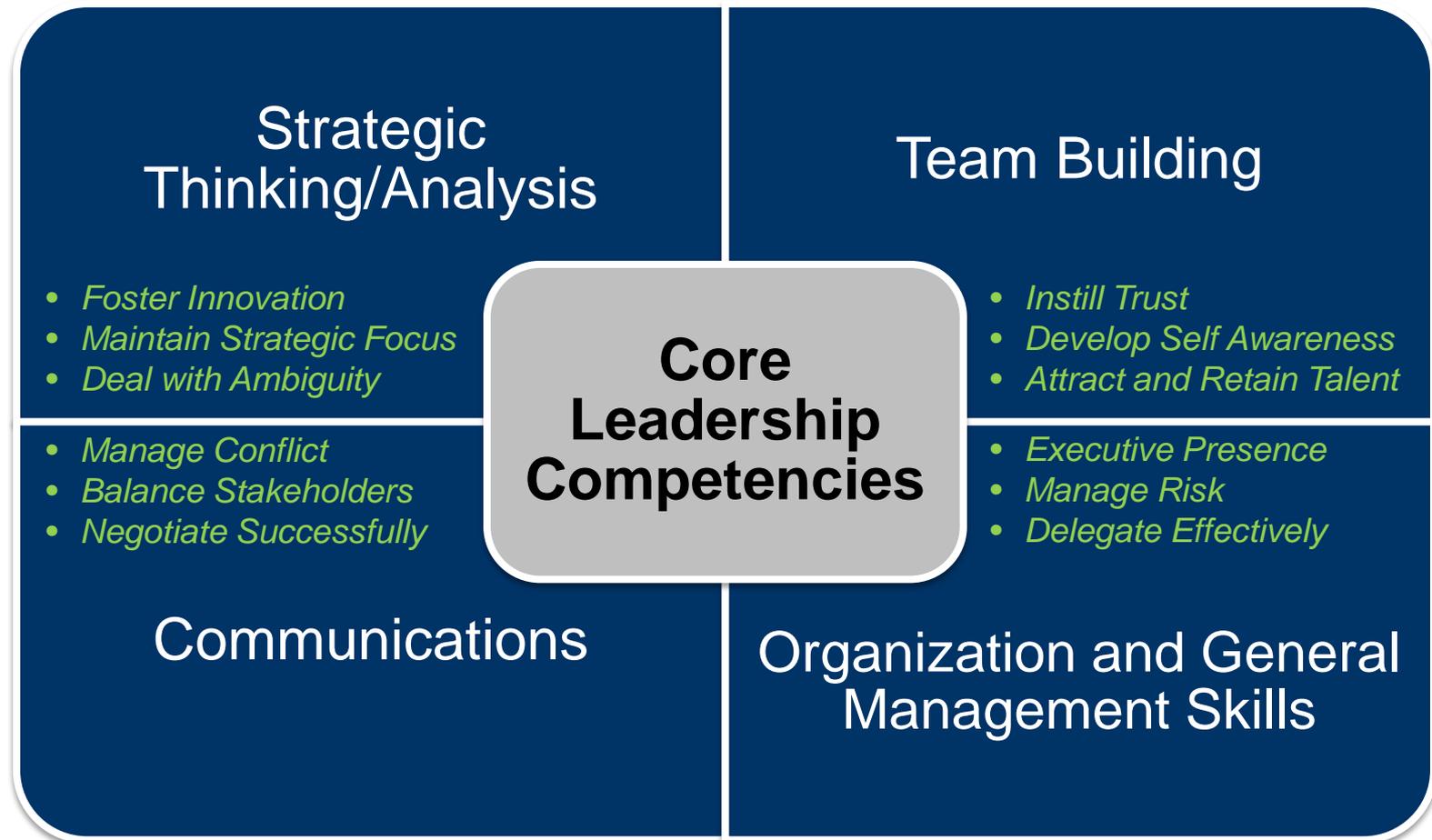
Team Building

- T1: Building high quality teams that demonstrate consideration for varied skills, strengths, experience, and potential
- T2: Setting and managing clear team expectations
- T3: Modeling what it means to be an authentic leader
- T4: Demonstrating awareness of cultural differences to anticipate the most effective ways to include diverse stakeholders and maximize their quality contributions.
- T5: Understanding potential skill development using effective mentoring programs

Communications

- C1: Using strong and effective communication skills including consultation with stakeholders, building trusting relationships, giving effective feedback, asking for help, especially regarding major decisions, listening with empathy, negotiating credibly for long-term viability
- C2: Demonstrating the use of inquiry to access diverse perspectives, especially in early stages and in critical decision-points of project work
- C3: Creating clear and concise project goals in consultation with primary stakeholders
- C4: Creating and facilitating lab partnership agreements
- C5: Capturing, disseminating and applying lessons learned

Learning Objectives Summary



Key Design Attributes

An intensive year-long program

The program emphasizes in-person week-long sessions and a year-long capstone project.

Cohort-based

Each calendar year a new cohort (25-30) of participants from across the DOE complex will participate as a group, accreting the PLI network.

Experiential learning

The program is simultaneously both a leadership development and project delivery course of study and practice, tailored to the DOE context.

Self-assessment

The program requires each participant to critically self-evaluate his/her own strengths and weaknesses in a leadership development context.

Knowledge sharing

The program will promote the development of informational resources that aid DOE project practitioners.

Governance Formalism

- A DOE-wide program, with SC supporting a PLI Office at SLAC National Accelerator Laboratory
- Federal program management and oversight; program manager function is within the Office of the Deputy Director for Science Programs

Participants

- Pay tuition and travel
- Receive support from home institution

PLI Director (SLAC)

- Executes the PLI program activities
- Manages the PLI Office

Advisory Board, reporting to the Director:

- Advises the Director, including participant selection
- Composed of project management and organizational learning experts
- Ideally, representative of the DOE complex

Governance inspired by
U.S. Particle Accelerator School

DOE pays for the PLI Office

Tuition pays for the
instructional program

Nomination and Selection Process

Eligibility:

PLI nominees shall have demonstrated their expertise as technical, business systems, or project leaders, with significant experience in private or public sector organizations with responsibility for project or organization performance and resources.

Nomination:

Nomination from employing institution is required. The Nominating Institution must prepare a letter of recommendation for the nominee from the Laboratory Director (or equivalent) and Chief Project Officer, if one exists.

Application:

The nomination package must include the letter of recommendation, a resume, and a Goals Statement.

Selection:

The Advisory Board reviews applications and recommends selections to the PLI Director.

2017 Cohort: 22 participants representing 13 organizations



Argonne Site Office
Fermi Site Office

The HEP project community is well-represented in the first cohort



Adam Bihary
Fermi Site Office
Deputy Federal Project Director for
LBNF/DUNE
Federal Project Director for PIP-II



Marc Kaducak
Fermilab
Head, Office of Project Support Services



Jolie Macier
Fermilab
DUNE-US Project Manager



Kate Sienkiewicz
Fermilab
IERC Project Manager



2017 Program Year

Events:

- | | | |
|----------------------|---------------|--|
| 1. Jan. 9-12, 2017 | SLAC | <i>Preparing to Lead DOE Projects</i> |
| 2. Mar. 20-23, 2017 | LLNL | <i>Becoming a Highly Effective Leader</i> |
| 3. Apr. - Jun., 2017 | online | <i>Leadership for Strategic Execution</i> |
| 4. May 15-18, 2017 | CU-Boulder | <i>Positioning the Project for Success</i> |
| 5. Sep. 11-14, 2017 | ANL | <i>Delivering High-Risk Complex Projects</i> |
| 6. Nov. 13-16, 2017 | Washington DC | <i>Navigating to the Finish</i> |



Program Content

Five in-person themed events + one online course + year-long capstone project

8.0 days tailored DOE
6.0 days Stanford
Leadership coaching
Capstone project

Stanford | Center for
Professional Development

+

Recruit experienced
DOE leaders

1. **Event #1 (in person)**
 - ❖ **Stanford APM course, “Converting Strategy into Action” [2.0 days] + tailored DOE content [1.0 day]**
 - ❖ Kickoff, self-assessment, project pre-planning, executing project strategy, cultural perspectives
2. **Event #2 (in person)**
 - ❖ **Stanford APM course, “Leading Effective Teams” [2.0 days] + tailored DOE content [1.0 day]**
 - ❖ Effective project leadership; stakeholder relationships; leading project teams; self-assessment/360 feedback
3. **Event #3 (online)**
 - ❖ **Stanford APM online course: “Leadership for Strategic Execution”**
4. **Event #4 (in person)**
 - ❖ **Tailored DOE course [2.5 days]**
 - ❖ Risk and contingency management; decision theory, analysis, geometric thinking; front-end planning; presentation skills
5. **Event #5 (in person)**
 - ❖ **Stanford APM course, “Executing Complex Programs” [2.0 days] + tailored DOE content [1.0 day]**
 - ❖ Construction/vendor management; interfacing with vendor/construction firms; project delivery methods
6. **Event #6 (in person)**
 - ❖ **Tailored DOE course [2.5 days]**
 - ❖ Conclusion: negotiations; change management; stakeholder relationships; crisis management; self-reflection; report-out capstone projects; PLI critique; celebration

Capstone Project

Designed to provide a team-oriented and integrative experience to culminate the course of study

Capstone Objectives:

1. A course-long experience that builds relationships
 - Small group teams; each team seeks a mentor
2. Reinforces learning experience and objectives
3. Leads to an artifact that will benefit DOE or future PLI cohorts
4. Exercises the participant's writing and presentation skills

The 2017 capstone project assignment is to write a case study of the Superconducting Super Collider project.

2018 Cohort

- The nomination/selection process for the 2018 cohort will kick off in July 2017.
- SC federal employees need to be nominated by cognizant Deputy Director. Self-nomination is not permitted. Federal employees attend at no cost, but these slots are limited in number.
- Lab employees need to be nominated by their laboratory director. Self-nomination is not permitted.
- Please help us spread the word!

DOE Project Leadership Institute Contacts

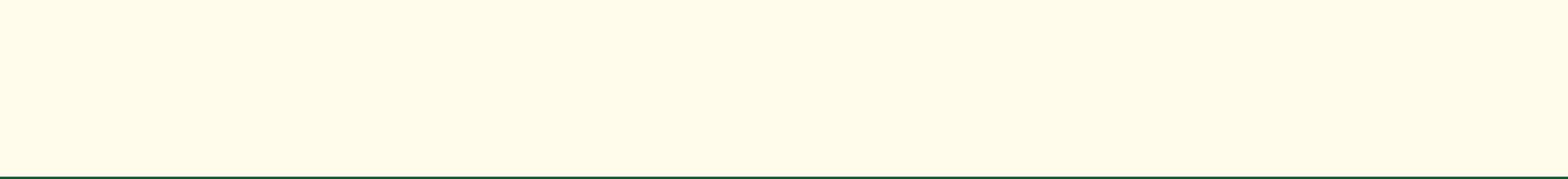
Website: <https://pli-slac.stanford.edu>

Jeff Sims
PLI Director



Jeff Sims, PLI Director: jsims@slac.stanford.edu

Ben Brown, PLI Program Manager: ben.brown@science.doe.gov



PLI Portal

Stanford | Center for Professional Development | 

You are logged in as jsims 



COURSE CONTENT

[Main](#)

[Event 1: Preparing To Lead DOE Projects](#)

[Cohort Biographies](#)

[Forum](#)

UPDATE YOUR PROFILE!

Please [update your profile](#).

SURVEYS

[PLI Diversity Survey](#)

[PLI Voluntary Self-Identification of Disability](#)

Project Leadership Institute



 **Welcome to the Project Leadership Institute class of 2017**

The Department of Energy has a long history of executing highly technical one-of-a-kind projects to accomplish its mission. To achieve that mission the leadership, planning and execution of these projects must be world class.

The Project Leadership Institute was established by the Department of Energy to cultivate a diverse network of successful project delivery practitioners and foster a culture of project excellence.

Your nomination to the PLI class of 2017 is a strong signal that your contribution to our project mission is highly valued. In order to successfully complete the program, you are expected to attend all planned sessions.

Congratulations on your selection to the PLI class of 2017.

Jeff Sims
Director of the Project Leadership Institute

CONTACTS

Beth Valente
Program Manager, Custom Programs
Stanford University
bvalente@stanford.edu

Jeff Sims
Director of the Project Leadership Institute
SLAC National Accelerator Laboratory
jsims@slac.stanford.edu

Jacki Cardoso
Business/Finance Manager
SLAC National Accelerator Laboratory
jcardoso@slac.stanford.edu

TECHNICAL SUPPORT

For technical support contact:
scpdsupport@stanford.edu

Theme for Event 1: *Preparing to Lead DOE Projects*

Defining project leadership – both generally and in the DOE context

Presentations at Event 1, January 2017

- Perspectives on DOE project management practices
- Lessons learned from DOE projects past
- Characteristics of successful megaprojects
- Stakeholder management
- Facilitating multi-lab partnerships
- **Converting strategy into action**
- **Project pre-planning**
- **Executing project strategy**
- **Cultural perspectives**

Theme for Event 2: *Becoming a Highly Effective Leader*

Understanding the crucial role of team building, developing constructive relationships, growing one's self-awareness, and enhancing conflict resolution and communication skills.

Presentations at Event 2, March 2017

- Building engagement and collaboration in DOE projects
- Interpreting and using your 360 emotional intelligence feedback
- Teamwork and learning from experience in DOE projects
- **Being the leader**
- **Emotional intelligence for team leadership**
- **Conflict and conflict management**
- **Observing team dynamics**
- **Teaming across boundaries**

Theme for Event 4: Positioning the Project for Success

Leading teams through risk and uncertainty; risk and contingency management; decision theory, analysis, geometric thinking; front-end planning process; presentation and written communication skills.

Presentations at Event 4, May 2017

- Interpreting StrengthsFinder results
- Unconscious bias
- Risk identification and risk management
- Promoting a safety culture
- Front-end planning
- Acquisition planning
- Transition from planning to execution – lessons from the SNS project
- Presentation skills

The 2017 PLI Cohort

Robin Ames



Angus Bampton



Adam Bihary



Gregory Capps



Ken Chow



Jeffrey Deal



David Funk



John Galambos



Carolyn Galayda



Gregory Hays



Jerry Kao



Marc Kaducak



Stephen Langish



Jolie Macier



Brady Orchard



Mark Palmer



Elmie Peoples-Evans



Dave Robin



Natalia Saraeva



Kate Sienkiewicz



Lauren Thompson



Scott Winters

