

NPP All Hands (Minds) Meeting

19 February 2015

Berndt Mueller

Associate Laboratory Director
for Nuclear & Particle Physics

BROOKHAVEN
NATIONAL LABORATORY
a passion for discovery

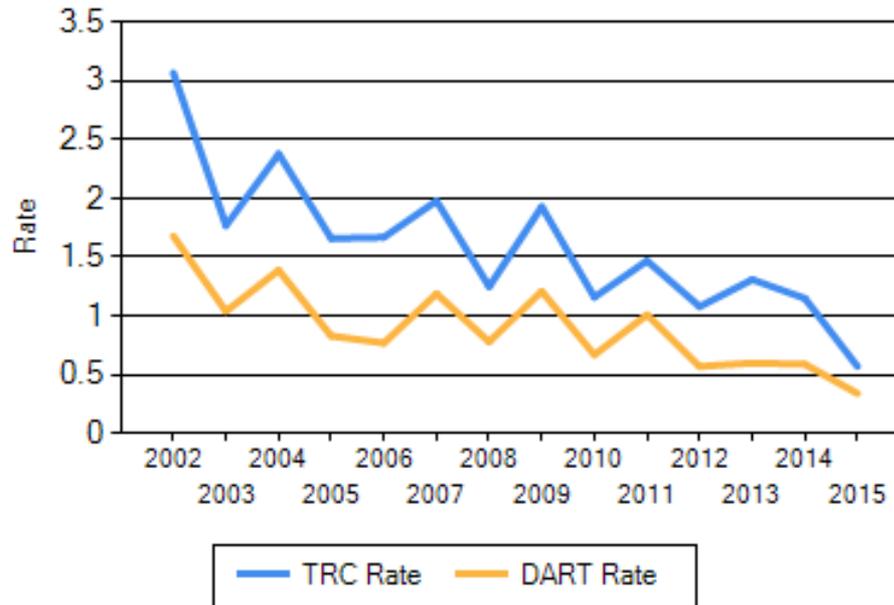


Today's topics

- ES&H Performance
- Business “Environment” Timeline
- FY16 Strategic Planning
- Budgets
- NP Long Range Planning
- Goal setting
- Supervisor Development Program

TRC/DART Case Rates

Recordable Injury Rates by Fiscal Year

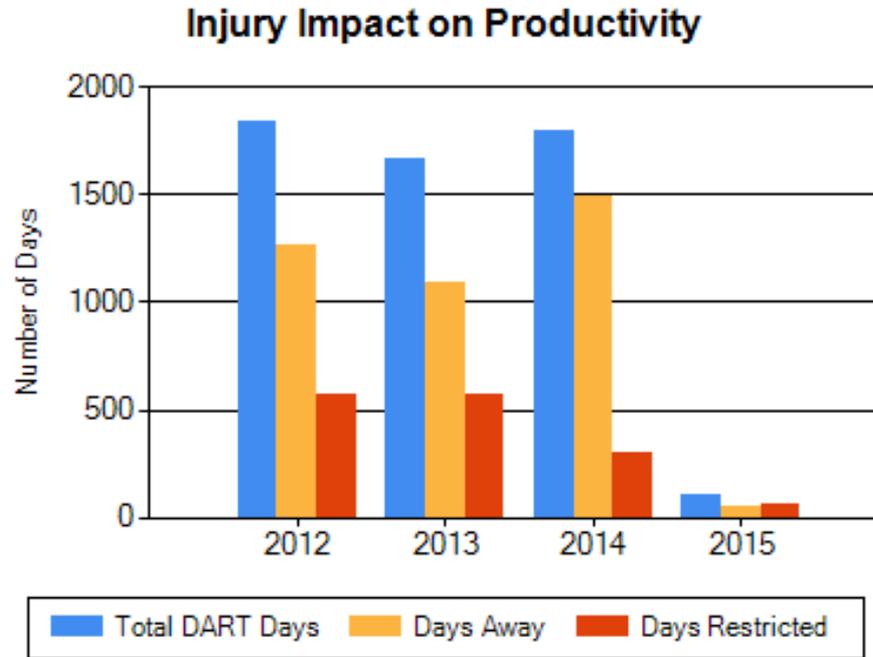


**Period Ending:
1/31/2015**

Fiscal Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
TRC Rate	3.07	1.77	2.38	1.66	1.67	1.98	1.25	1.93	1.16	1.47	1.08	1.31	1.15	0.57
DART Rate	1.68	1.04	1.39	0.83	0.77	1.19	0.78	1.21	0.67	1.01	0.57	0.6	0.59	0.34
TRC Cases	82	46	60	42	41	50	32	51	33	45	36	39	33	5
DART Cases	45	27	35	21	19	30	20	32	19	31	19	18	17	3

TRC/DART Case Rates

**Period Ending:
1/31/2015**



Fiscal Year	2012	2013	2014	2015
Total DART Days	1845	1665	1793	130
Days Away	1268 / 69%	1092 / 66%	1491 / 84%	50 / 38%
Days Restricted	577 / 31%	573 / 34%	302 / 16%	80 / 62%

Transitional Duty:

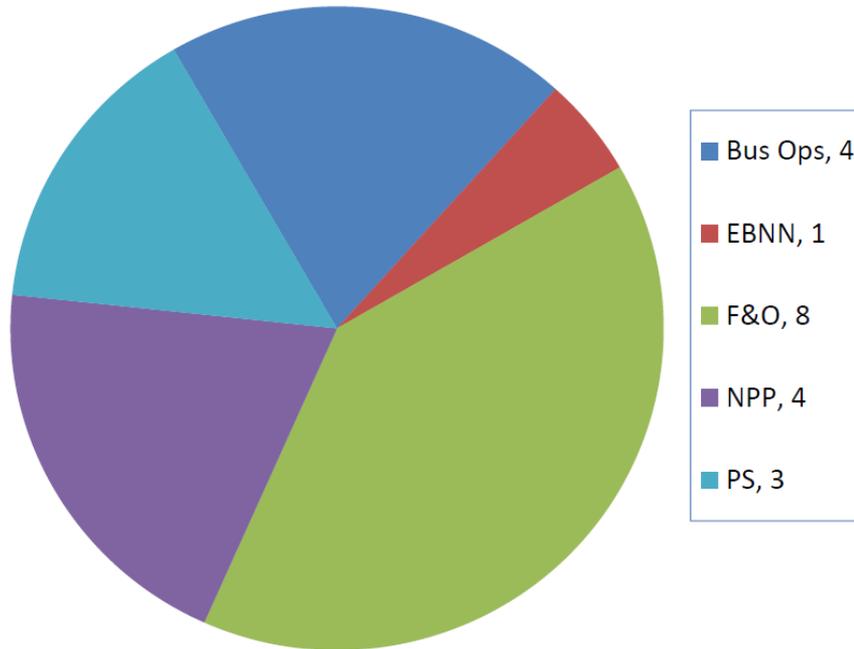
- FY15 Restricted Duty significant improvement from FY14.
 - Results in cost savings to BSA Workers' Comp. costs and improvement to worker productivity.

Note: % = of the total DART days, how many were Days Away vs Restricted

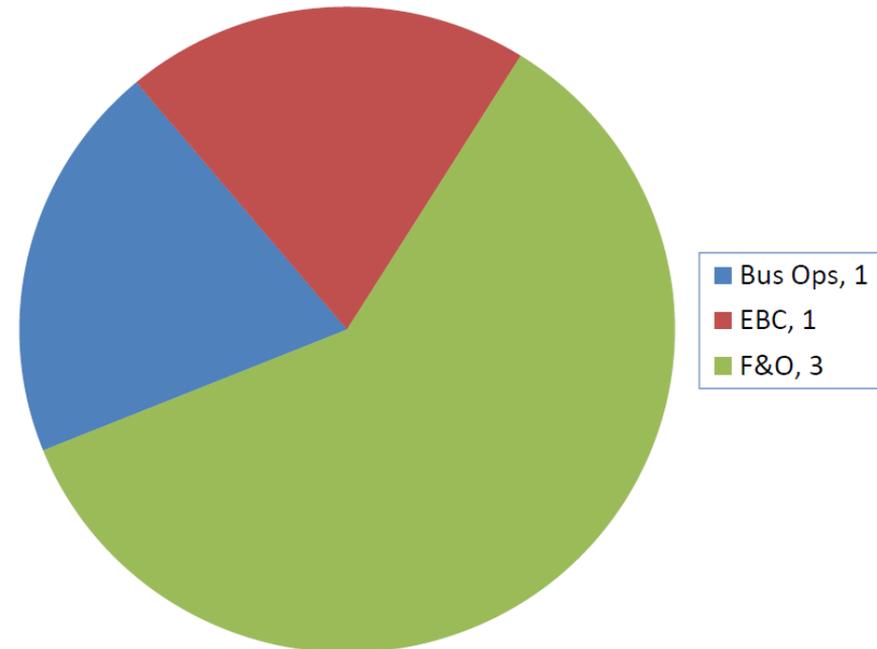
TRC/DART Case Rates

Period Ending: 1/31/2015

FY2015 # of Injuries by Directorate



FY2015 # of Recordable Injuries by Directorate



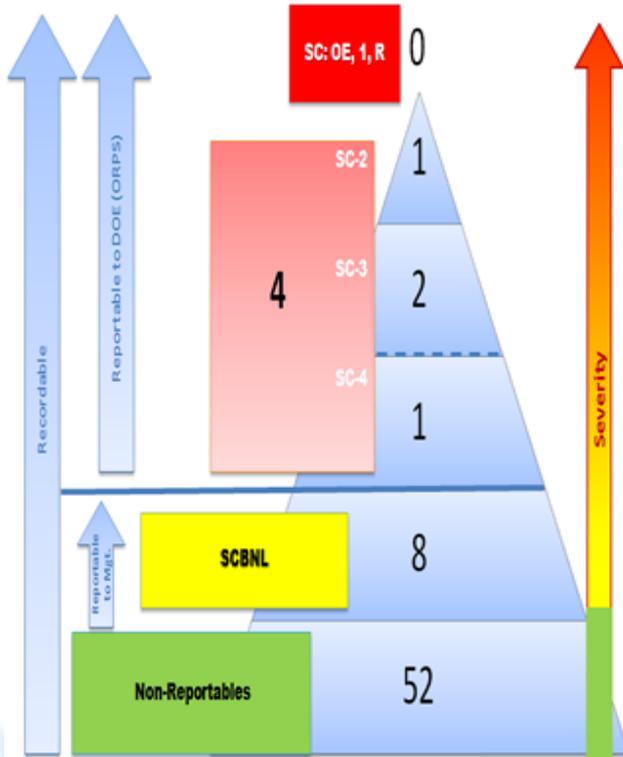
FY15 20 injuries (first aid and TRC):

- **6-Slips/Trips/Falls: 30%**
- **4-Material Handling: 20%**
- **4-Lacerations, particularly hand injuries: 20%**

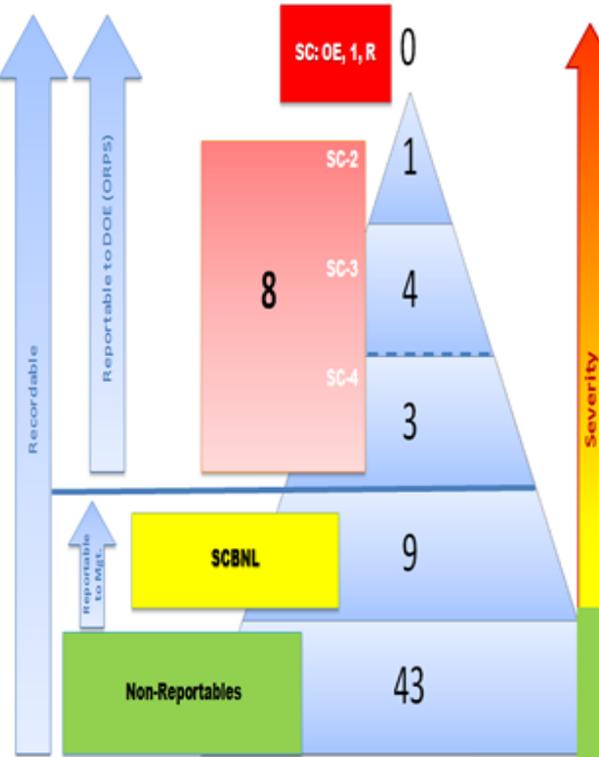
Event Performance

BNL Events Pyramid – First Quarter Comparison

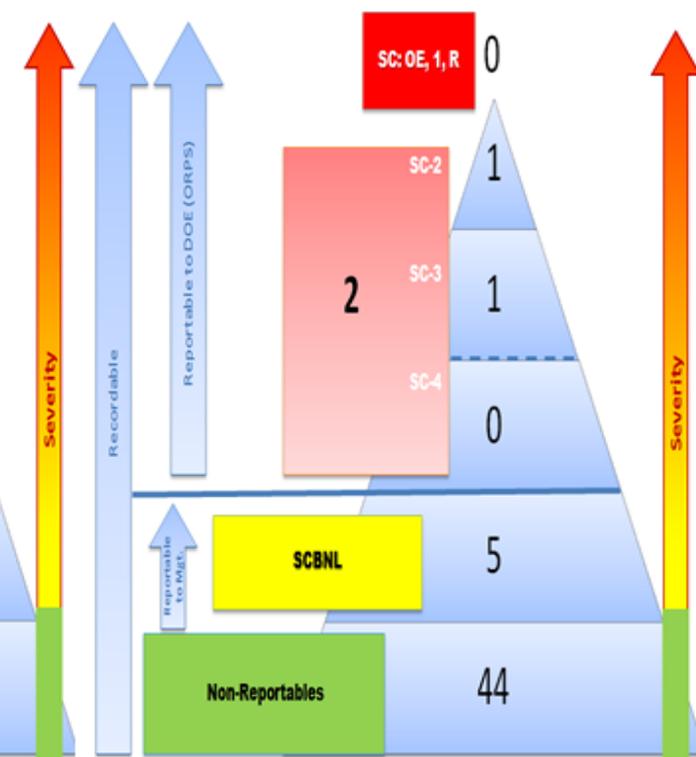
The BNL Event Pyramid: Q1 FY 2013



The BNL Event Pyramid: Q1 FY 2014



The BNL Event Pyramid: Q1 FY 2015



In FY15 Q1 the number of ORPS Reportable Events is much lower.
 Personal contact with an electrical hazardous energy source (SC2) AT# 8247
 Gas alarm results in building 735 evacuation (SC3) AT# 8264

New Performance Indicator:

Business “Environment” Timeline

- All events with potential negative impacts on BNL business (except ES&H):
 - Financial
 - Contractual
 - Management concern
 - Customer (DOE, BHSO) concern
 - Program
 - Legal
 - Property
- Appoint a BET Task Force charged with identifying sources of BET events in NPP and recommending prospective counter measures

Low Energy RHIC electron Cooling (LEReC) Project Review

Description:

On 7-11 July 2014 the Low Energy RHIC electron Cooling (LEReC) project was presented in a Technical, Cost and Schedule Review to the DOE Office of Nuclear Physics. Project approval was postponed because of concerns of the technical readiness of a major components (SRF electron gun), and cost and schedule estimates developed in insufficient detail.

Analysis/Discussion:

The technical solution presented for Low Energy RHIC electron Cooling (LEReC) included a novel high-current SRF electron gun that has not yet demonstrated the parameters needed for the project. While more complex and risky than alternative solutions, this approach provided the highest long-term technical potential for the department in light of technology development for eRHIC.

The development of a viable technical solution for the overall project proved more complex than initially anticipated, leading to changes in the scope, layout and parameters of other components. This then delayed the physics specifications, engineering specification, and thereby cost estimates. Only a top-down estimate of contingency was possible for the review. The delays also impacted the development of the detailed schedule, and the Project Execution Plan.

Actions and Lessons to be Shared:

The selection of the technical approach impacts all other aspects of a project. Levels of project control expected for this project were much higher than for past, similar projects, requiring, for the first time, fully resource loaded schedules and cost estimate and risk contingency. These new requirements were not clearly communicated by the sponsor before the July review.

Lesson learned:

Clearly understand the level of project control expected by the sponsor.

FY16 Strategic Planning

- Guided by Lab Agenda laid out in the successful BSA Contract Proposal
- Pre-retreat meeting to discuss the BSA Proposal
Thursday, March 5
- Retreat #1 focusing on Science and Growth
Friday, March 13
- Retreat #2 focusing on Operations and Cost Savings
Tuesday, March 17

Critical Outcome: *Understanding the origins matter and mass*

Strategies: Complete the scientific mission of RHIC
Transition from RHIC to eRHIC

Initiative: *EIC and RHIC recommendations in the Long Range Plan in FY15*

Outcomes:

The NSAC long range planning committee will submit its final recommendations to DOE and NSF by the end of 2015. The desired outcomes are recommendations in the LRP for (a) an EIC as the highest priority for new construction and (b) for completion of the scientific mission of RHIC as a high priority.

Milestones for FY 2015:

- Strong recommendations in the white papers from the nuclear physics town meetings for the completion of the scientific mission of RHIC and construction of an EIC.
- Complete or update documents as input into the LRP: EIC white paper, eRHIC design study, hot QCD white paper, RHIC Spin white paper.
- Endorsement of our EIC preliminary cost estimate by the NSAC subcommittee chaired by Ed Temple.
- Jointly with JLab, arrange a meeting of prominent EIC users in preparation of the LRP resolution meeting.

Budget Outlook

- Excellent for NP, not too bad for HEP -
 - If Congress manages to approve a budget for FY16
- Hopes for improvements in HEP budgets after P5 have (so far) not materialized
 - Guidance now is \$-flat in research in FY16+17, then 1% increases in the next 5 years
- Standard Labor Rate increases of >4% are a problem

NP LRP Charge

The new NSAC Long Range Plan (LRP) should articulate the scope and the scientific challenges of nuclear physics today, what progress has been made since the last LRP, and the impacts of these accomplishments both within and outside of the field. It should identify and prioritize the most compelling scientific opportunities for the U.S. program to pursue over the next decade and articulate their scientific impact. A national coordinated strategy for the use of existing and planned capabilities, both domestic and international, and the rationale for new investments should be articulated. To be most helpful, the LRP should indicate what resources and funding levels would be required (including construction of new facilities, mid-scale instrumentation, and Major Items of Equipment) to maintain a world-leadership position in nuclear physics research and what the impacts are and priorities should be if the funding available provides for constant level of effort from the FY 2015 President's Budget Request into the out-years (FY 2016-2025), with constant level of effort defined using the published OMB inflators for FY 2016 through FY 2025. A key element of the new NSAC LRP should be the Program's sustainability under the budget scenarios considered.

Budget guidance: FY 2015 + Cost of Living

NP LRP Process

- Town Meetings: Complete
- White papers: Complete
- EIC Cost Review (Ed Temple) subcommittee met in Chicago in January
 - BNL estimate for eRHIC = \$755M + detector
 - eRHIC team did a fantastic job presenting and responding to questions
 - Committee report at NSAC meeting in early April
- LRP Resolution meeting 16-20 April 2015
- LRP from NSAC to DOE in October 2015

Goal setting

- Online goal setting has been opened
- Setting goals is a useful exercise, even if you have to revise them late in the year
- Everyone needs goals (unless you want to perform a random walk) so why not write them down
- Goals are most useful if they are communicated to your reporting team, your peers, your supervisor
- Many of your goals can only be achieved if your team members and your supervisor know them
- Goal setting is good even for theorists, because they do more than invent new ideas!

My goals for FY15

- High priority recommendations in NSAC LRP for:
 - Complete the scientific mission of RHIC
 - Construction of an EIC in the U.S.
- Successful Run-15 of RHIC (p+p, p+Au and p+Al)
- Shepherd the sPHENIX project towards CD-0
- Position the HEP program at BNL for the future under P5 (ATLAS Phases 1+2, LBNF, LSST)
- Consolidate the improved operational excellence of MIRP
- Participate in the BNL-wide computing initiative
- Grow NPP budget by 5% over 2 years
- Maintain outstanding ES&H performance
- Increase staff diversity in NPP

Goals set by DOE

aka: The PEMP Notables

PEMP Notable Outcomes for NPP

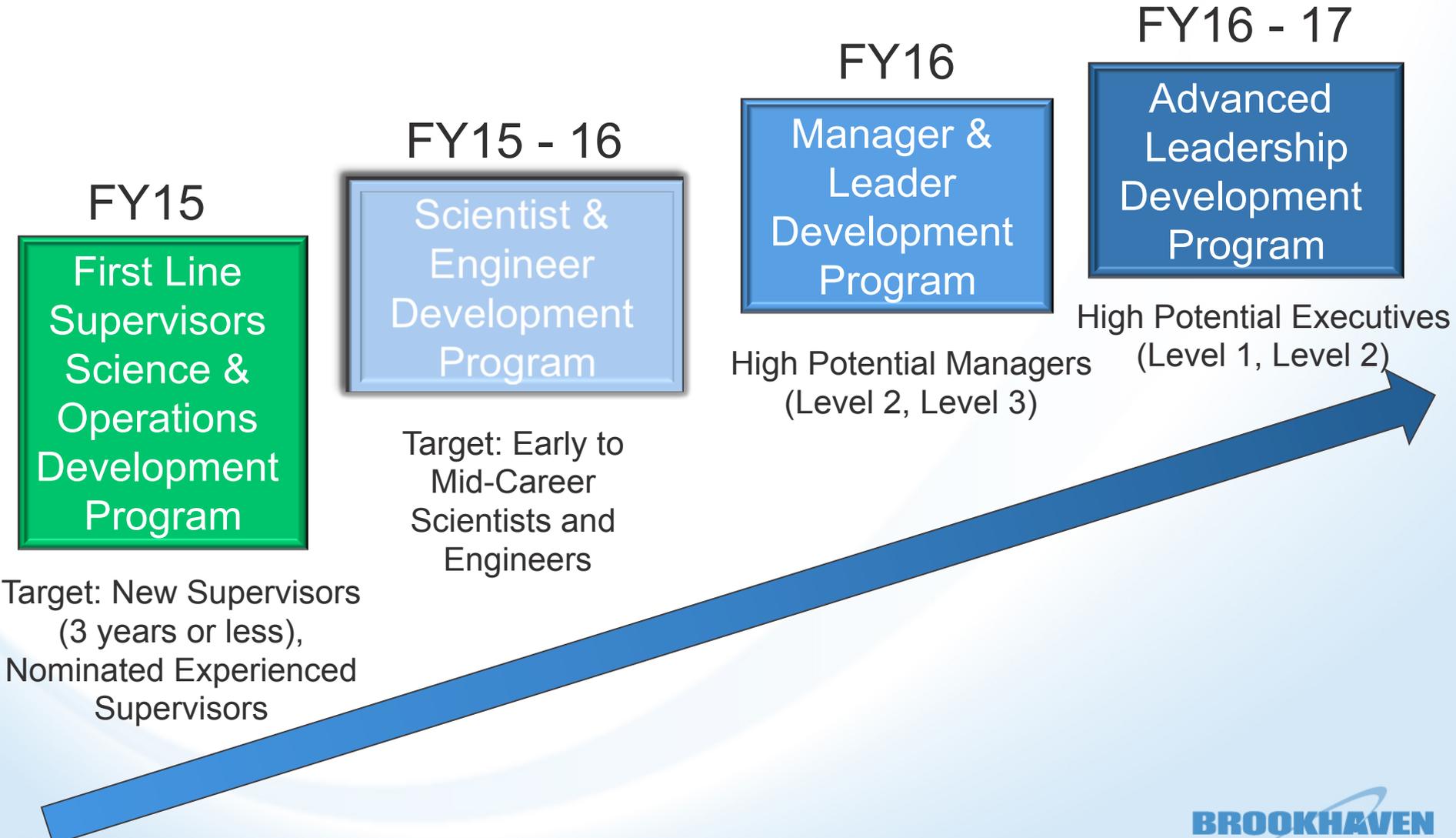
HEP: Submit a revised proposal to create an Office of Science User Facility for Energy Frontier Physics that captures the BNL, LBNL, SLAC, and ANL activities supporting the research using the A Large LHC Toroidal Apparatus (ATLAS).

HEP: Complete all requirements needed to certify the Accelerator Test Facility as Office of Science User Facility for the Accelerator Stewardship subprogram of HEP.

HEP: Achieve CD-3 approval for the LHC ATLAS Detector Upgrade Project.

NP: Strengthen the BNL Isotope Program Management team to promote more effective operations and communication by filling vacant senior management positions.

BNL's Development Framework



Nomination criteria

The New Supervisor Orientation Program (NSO) is designed for supervisors:

- With less than three years in a supervisory role at BNL.
- Nominated for the *Supervisor Development Program (SDP)* who have not already attended the previous NSO (NSO is a pre-requisite for the Supervisor Development Program).

The Supervisor Development Program (SDP) is designed for supervisors:

- With six months to five years of supervisory experience (you can nominate individuals with more experience if you feel they will benefit).
- With a solid performance record. It is not intended for individuals with significant performance issues.
- Who are willing to fully engage in the year-long program with the group. This includes attending all of the sessions and engaging in practice activities).
- Whose manager is willing to engage.
- Who have completed the pre-requisites.

New Supervisor Orientation (delivered by Line Management)

Day 1

- Opening Comments
- Role of the Supervisor
- Cycle of the Employee
 - Recruitment
 - Training
 - Career Development
 - Performance Management
 - Compensation/Benefits
 - Termination
- Supervisory Basics
 - Employee Concerns
 - Absence Management
 - Employee Discipline
 - Time Reporting
- Overview of Science Directorates

Day 2

- Role of DOE
- Working with Deployed Staff
- Overview of Support Directorates
 - Business Services
 - F&O
 - ES&H
 - HR
- Overview of Staff Offices
 - PPQM (includes contractor assurance, governance model)
 - Strategic Partnerships
 - Stakeholder & Community Relations

Goals for Supervisor Development

- Deepen participants' understanding of the Lab and how their actions impact achievement of Laboratory goals and mission
- Participants understand their leadership role and recognize the importance of their contributions
- Increase self awareness and focus on performance, accountability and empowerment
- Gain skills and tools to manage, develop and engage staff
- Strengthen their time management, delegation and problem solving and decision making skills
- Broaden their BNL network by working together as a group

BNL Supervisor Development Program

Pre-requisites: New Supervisor Orientation, Legal Issues in Supervision Series (required courses)

	Timeframe	Topic	Speaker(s)	Time
FIRST HALF	March Day 1	Kick Off: <ul style="list-style-type: none"> • Opening Remarks • Orientation • Lab Overview • Luncheon • 360° Feedback and Development Planning • Wrap-up/Next Steps 	<ul style="list-style-type: none"> • Lab Director or Deputy • Learning & Development (L & D) • DDO or DDST • All • L & D • L & D and /or Senior Leader 	1 day
	March Day 2	Understanding and Managing Behavioral Differences (Social Styles and Versatility)	L & D	1 day
	March Day 3	<ul style="list-style-type: none"> • Delegation • Time Management • Goal Setting 	} <ul style="list-style-type: none"> • Experienced Manager/ L & D 	½ day
	March Day 4	<i>Transition to Supervisor Role (for newly promoted supervisors only)</i>	L & D	½ day
	April Day 1	<ul style="list-style-type: none"> • Science Directorate Strategies • Business Operations 	<ul style="list-style-type: none"> • DDST & Science ALDS • CFO/BOM/Budget Office 	½ day ½ day
	April Day 2	Five Dysfunctions of a Team	L & D	½ day
	May Days 1 & 2	Crucial Conversations/Crucial Accountability	L & D/Manager Participation	2 days
	May Day 3	Problem Solving & Decision Making	Experienced Manager/ L & D	½ day
	June Day 1	Performance Management	L & D or HRM	½ day

BNL Supervisor Development Program (cont.)

	Timeframe	Topic	Speaker (s)	Time
FIRST HALF	June Day 2	Managing Poor Performance	L&D or HRM	½ day
	July	Human Performance Improvement	Office of Institutional Improvement	½ day
	August	<ul style="list-style-type: none"> • Community Service Project • Debrief Project 	<ul style="list-style-type: none"> • Senior Leader • Senior Leader 	TBD
SECOND HALF		<i>Optional: One on One meetings with L & D to review development plans. (additional support provided as requested)</i>		
	September	<i>Elective Course (Target to class needs e.g., Establishing Trust, Increasing Versatility, Business Acumen Skill, Behavioral Interviewing, etc.)</i>	L&D	½ day
	October	Coaching with Versatility	L&D	1 day
	November	Lab Operations	ALDs	½ day
	December	Safety Conscious Work Environment (SCWE)	TBD	1 day
	January	Change Management: Overview of Influencer Model	L & D or Tech Team	½ day
	February	Next Steps in Development Plan Program Graduation Ceremony	<ul style="list-style-type: none"> • L&D • L&D, Senior Management, Supervisors' Managers 	½ day } 1 hour

APPROXIMATE CLASSROOM HOURS: 110 hours over 12 months (1 day per month or 3 days per quarter)

Summary

- Time to set goals for FY15
- Strategic planning
- Nominations for supervisor development program
- Let's make this the safest year ever
 - Keep your head in the game
 - Be wary of slips, trips, and falls – especially now!