



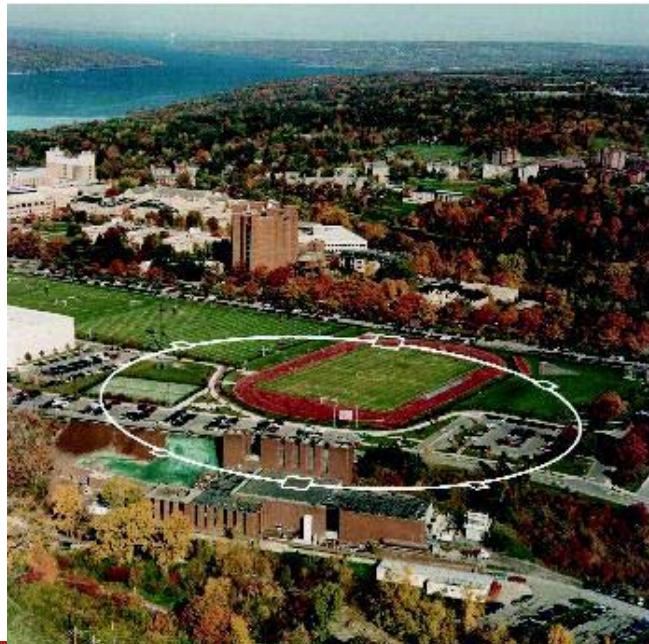
Cornell University
Laboratory for Elementary-Particle Physics

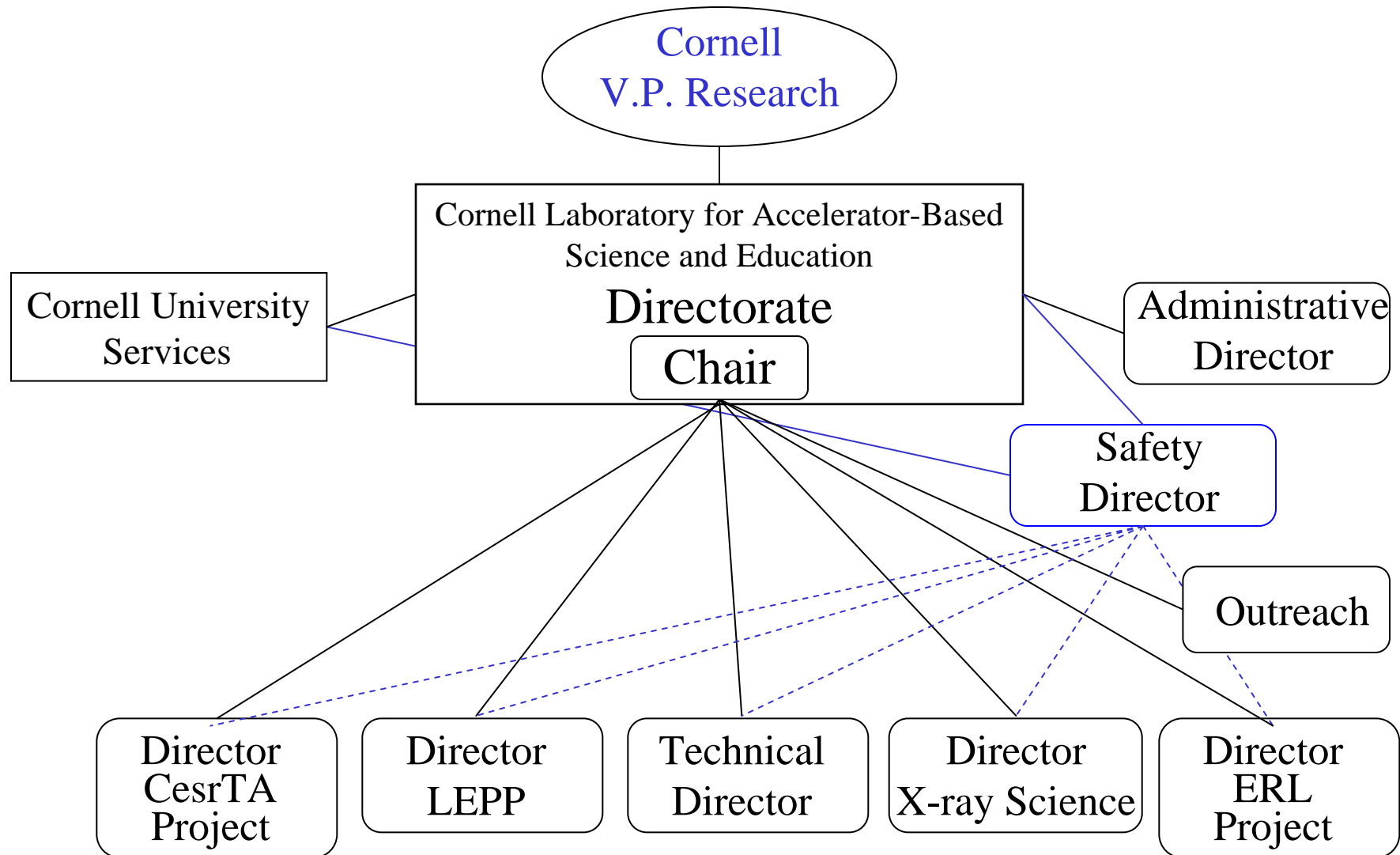


Laboratory Plan

David Rice

*Cornell Laboratory for
Accelerator-Based Sciences and Education*







- CLASSE has the flexibility to carry out parallel programs with ~210 employees (incl. 50 CHES)
- Accelerator operations group of 18 physicists, engineers, and grad students, & 8 operators.
- Extensive technical support groups with average years of service >19
- Primary work groups:
 - Administrative Services
 - Cryogenic
 - Drafting & Publications
 - Electronic
 - Machine Shop
 - Materials Handling
 - Technician – Mech, Elec, Plumbing
 - Operations
 - Purchasing & Receiving
 - RF/SRF
 - Vacuum



- Safety Director appointed by Laboratory Director
- Safety Committee composed of long-term employees including technician, engineering, physicist staff.
- Safety Committee responsible for approval of any policy changes affecting safety and promoting proactive safety program.
- New projects / policy changes:
 - Request with safety assessment presented to Safety Director
 - Documents reviewed by small group of experts appointed by Safety Director
 - Review and documents presented to Safety Committee
 - Presentation, discussion, and vote in meeting.



| 2008 | | | | | | | | | | | |
|--------------|------|--------|--------|--------------|--------|--------------|------|--------|--------|--------|-----|
| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| CESR-c | | | + | CHES | CesrTA | Upgrade Down | | | CHES | CesrTA | |
| 2009 | | | | | | | | | | | |
| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| Upgrade Down | CHES | CesrTA | CHES | Upgrade Down | | CesrTA | | CHES | CesrTA | | |
| 2010 | | | | | | | | | | | |
| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| Upgrade Down | CHES | CesrTA | | CHES | CesrTA | | CHES | CesrTA | | | |
| 2011 | | | | | | | | | | | |
| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| Major Down | | CHES | CesrTA | | CHES | CesrTA | | CHES | | | |

- **Multi-level approach to scheduling**
 1. Operations Director brings about consensus between administrative staff from relevant programs
 2. Meeting of program directors if needed (rare)
- **Minimal overhead in transitions between programs**
 - Change over between accelerator running modes usually less than 1 shift
 - CHES (high energy) operation benefits vacuum chamber conditioning process.



- **Several programs being carried out at CLASSE**
 - Completion of CLEO-c program (ends 3/31/2008)
 - High Energy Physics:
 - CLEO-c data analysis, CMS, ILC Detector R&D
 - CHES operation
 - accommodated in schedule – operations technical support staff
 - ERL Phase 1a prototype injector
 - installation complete by February, 2008
 - primarily operations (~6 accelerator physicists & engineers) and occasional maintenance/modifications
 - experimental program through February, 2009
 - ERL detailed engineering
 - proposal to be submitted to continue detailed engineering work for a full ERL
 - work ramping up as Phase 1a is completed
 - Accelerator R&D
 - superconducting RF development



- Cornell has an extensive network of services and departments, >14,000 staff and faculty.
- Most services covered by overhead.
 - a few of the more important:
 - Libraries
 - Human Resources
 - Planning, Design & Construction
 - Purchasing
 - Environment, Safety & Health
 - Information Technology
 - Risk Management
 - Campus Police



• Cornell Units:

- Libraries
 - 18 Libraries on campus
 - Access to E-journals
- Human Resources
 - Hire/discharge/discipline guidelines and assistance
 - Employee Assistance Program
- Planning, Design, Construction
 - Maintenance shops – electrical, HVAC, plumbing
 - Construction projects
 - Planning & Design
 - Architectural services
 - Construction contracts
 - Building permits
- Purchasing
 - Bidding, purchasing contracts
 - Procurement card services
 - e-SHOP online purchasing
 - preferred vendor contracts



- **Cornell Units:**
 - Environmental Health & Safety
 - Emergency Preparedness – Terrorism
 - Biological Safety
 - Emergency Services
 - Fire Safety
 - General Safety
 - Occupational Health
 - Radiation Safety
 - Chemical & Laboratory Safety (materials disposal)
 - Information Technology
 - Phone, network services
 - Individual computer consulting
 - Risk Management
 - Insurance
 - Claim management
 - Risk assessment and consulting
 - Campus Police
 - Emergency response
 - Police services



- LEPP is well prepared to carry out the CEsrTA program effectively and efficiently with a broad resource base.
- LEPP's placement in the Cornell University structure provides a wealth of resources to leverage in accomplishing program goals.