

# Information Services and Technology

**Presentation to Sloan Management 2/12/2004**

Jerry Grochow, Vice President for Information Services & Technology



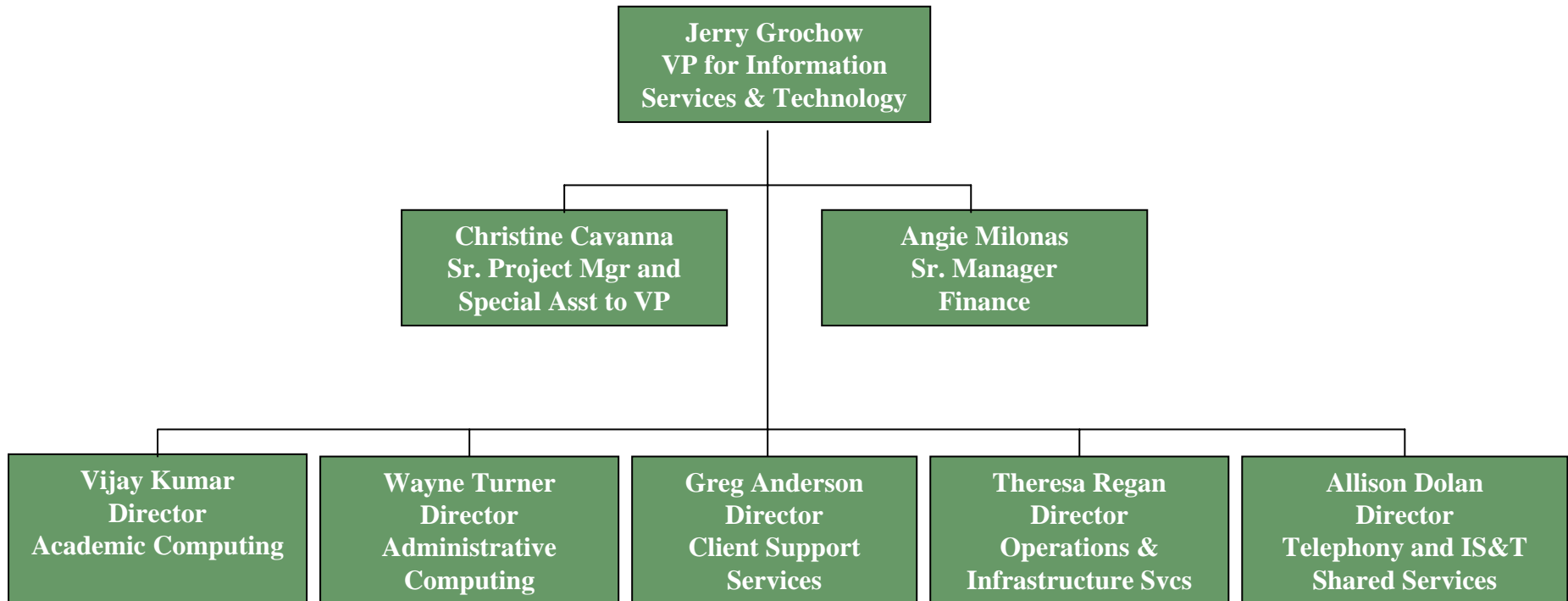
# IS&T Promotes Service First...

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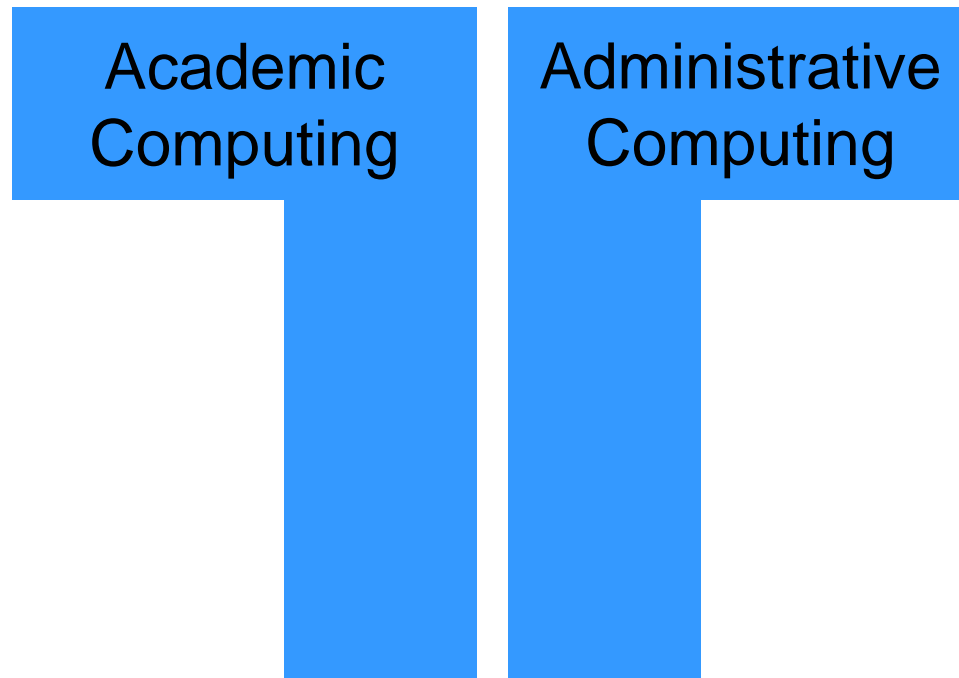


"I'M THE COMPUTER FAIRY. TECHNICAL SUPPORT SENDS ME TO FIX THE WORST PROBLEMS."

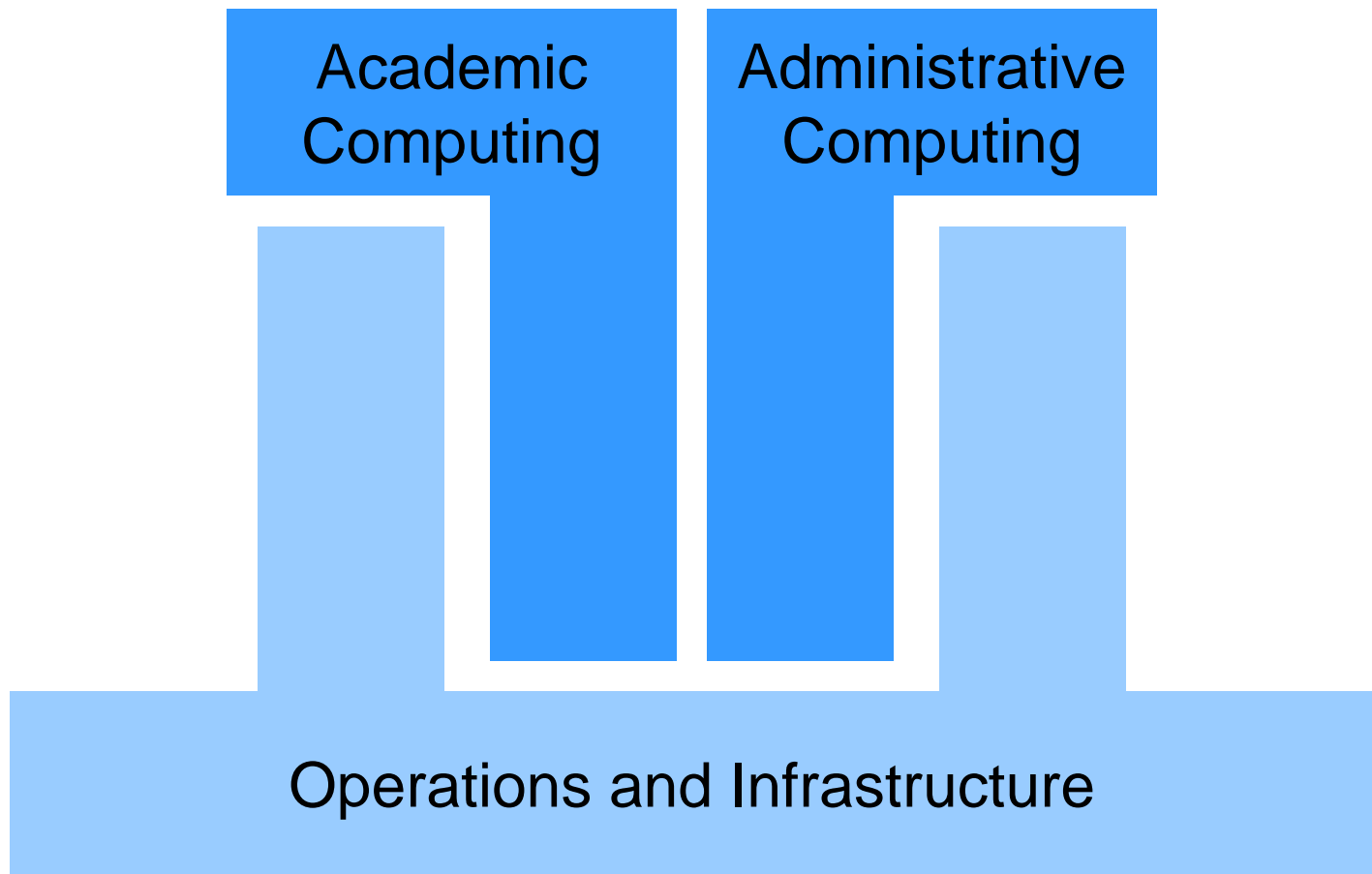
# IS&T Organization Structure



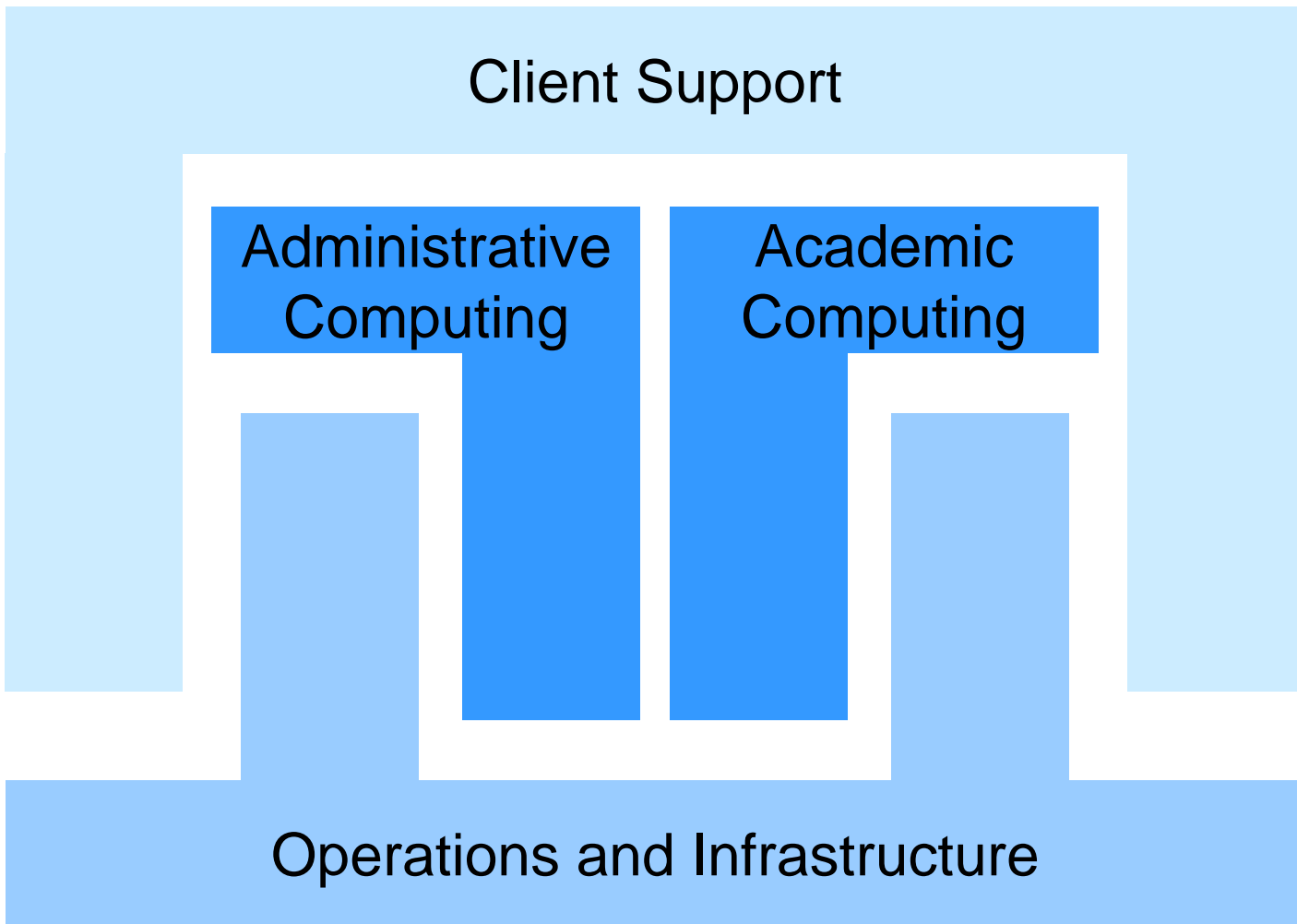
# IS&T Service Structural Diagram



# IS&T Service Structural Diagram

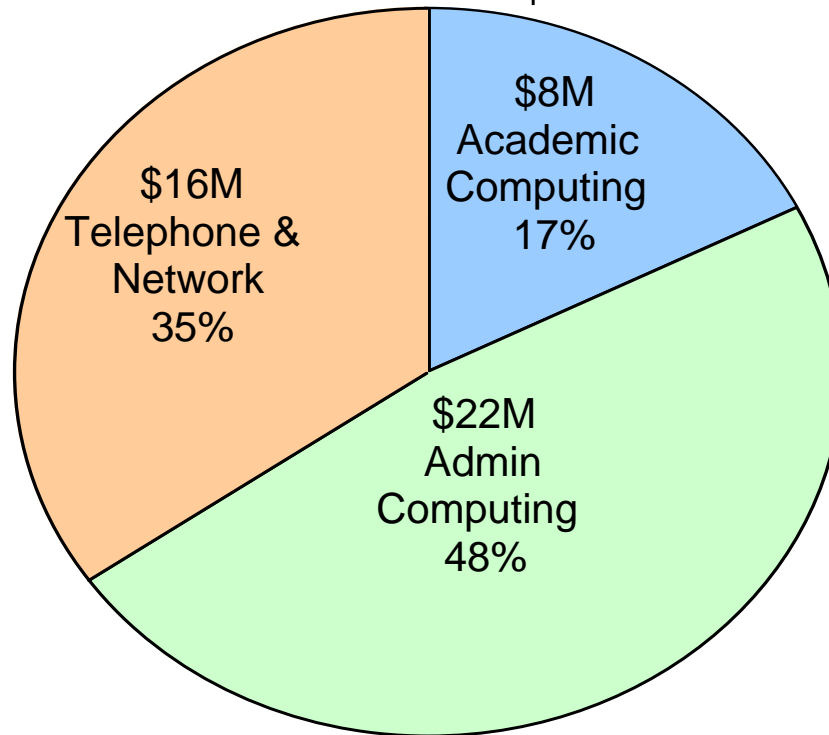


# IS&T Service Structural Diagram



# IS&T Service Structural Diagram

IS&T Dept Gross Expense Budget for  
FY 2005 = \$46M



# Did You Know...

- **MIT has over 350 Gigabytes of Internet traffic per day – equivalent to about 2% of the Library of Congress.**
- **mit.edu received 432,722 mail messages Monday – over 30% were classified as Spam.**
- **The IS&T Help Desk receives almost 5,000 calls/emails per month.**
- **There are over 45,000 network connections on campus – about 3 for every person.**
- **There is over 5000 miles of fiber optic cable connecting campus buildings. Most of it is unused.**
- **It will cost almost \$50 million to upgrade all network cabling and equipment on campus for 100Mb connections.**
- **There are more than 3,400 users of TechTime on campus.**
- **There is approximately 1.6 million feet of Network and Telephone cable going into the Brain & Cognitive Sciences Building.**
- **There is approximately \$10M in network router equipment in the Stata Center**

# Observations from the IS&T Help Desk

- 1350 cases overall makes Sloan the top DLC in cases created
- Much of Sloan community directly interacts with IS&T
  - 81% of Sloan administrative community (60% for all MIT)
  - 62% of Sloan Faculty (55% for MIT), 19% students (30% MIT)
- Sloan clients seek help less than the MIT average
  - 55% of Sloan cases are for consulting help, vs 68% across MIT
  - 4.9 cases per Admin client, vs. 6.8 for across MIT ( ↓ 30%)  
2.1 for Faculty, vs. 2.8 ( ↓ 25%), students 1.5 vs 1.9 ( ↓ 21%)
- Sloan efforts at prevention and local support seem to be effective, especially for their students.
- Admin, Faculty and Students had different problem “hotspots” but Network issues were high for all.

# IS&T Groups on Campus

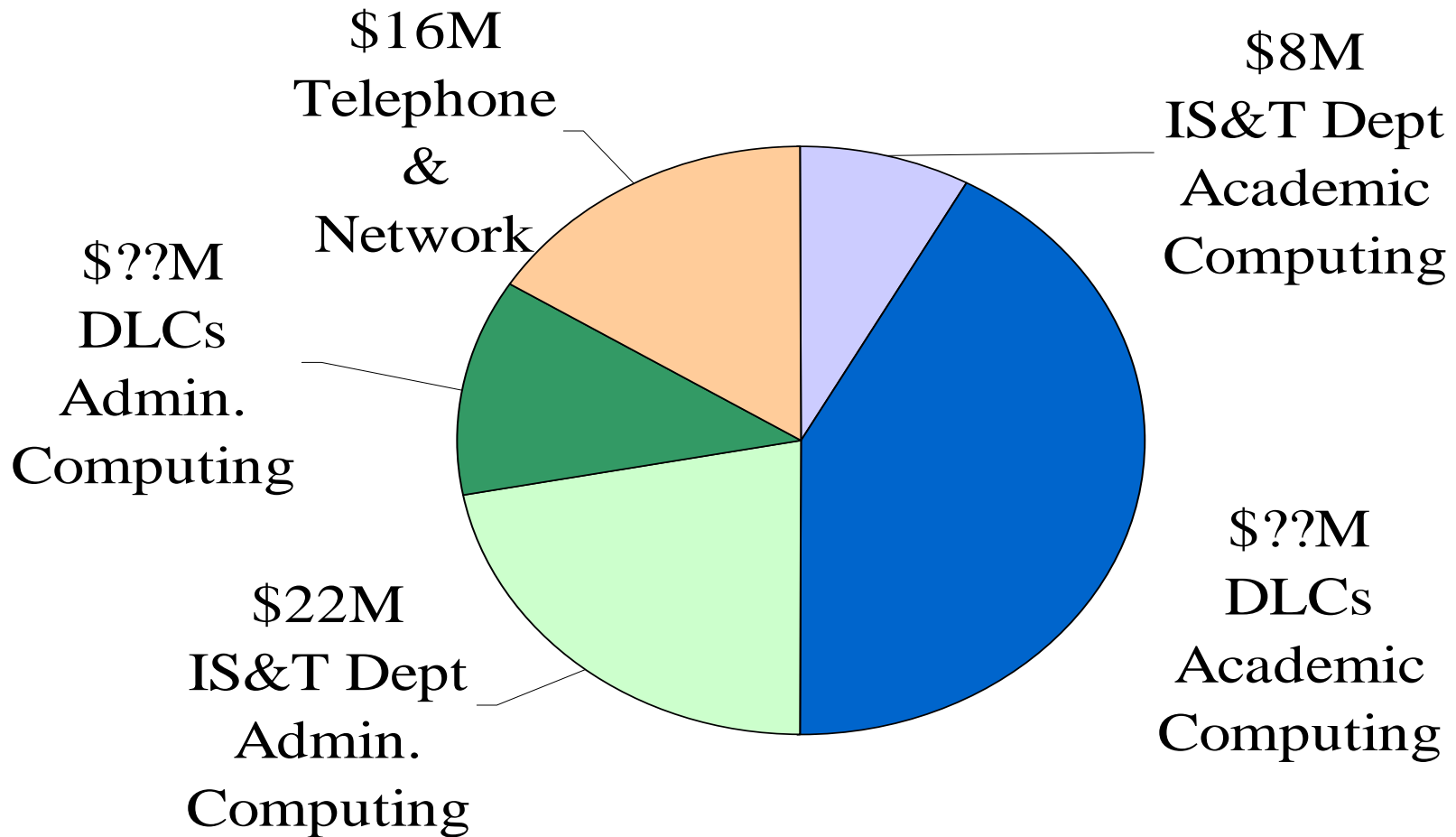
- IS&T
- Lincoln Lab
- Media Lab
- Economics
- BioMicro Center
- CSAIL
- MicroTechnology Lab
- Open CourseWare
- Office of Sponsored Programs
- Lab for Nuclear Science
- Sloan
- CAO - LFO
- Research Lab of Elec.
- EECS
- Plasma Fusion Center
- Libraries
- Mathematics
- Chemical Eng.
- Controller's Accounting Office
- Alumni Association
- Medical
- Urban Studies & Planning
- Chemistry
- Academic Media Production Services
- Plasma Science & Fusion Center
- Treasurer's Office
- Human Resources
- Center Space Research
- Student Services
- Resource Development
- Facilities
- Broad Institute
- Technology Licensing Office

# MIT Committees Advising IS&T

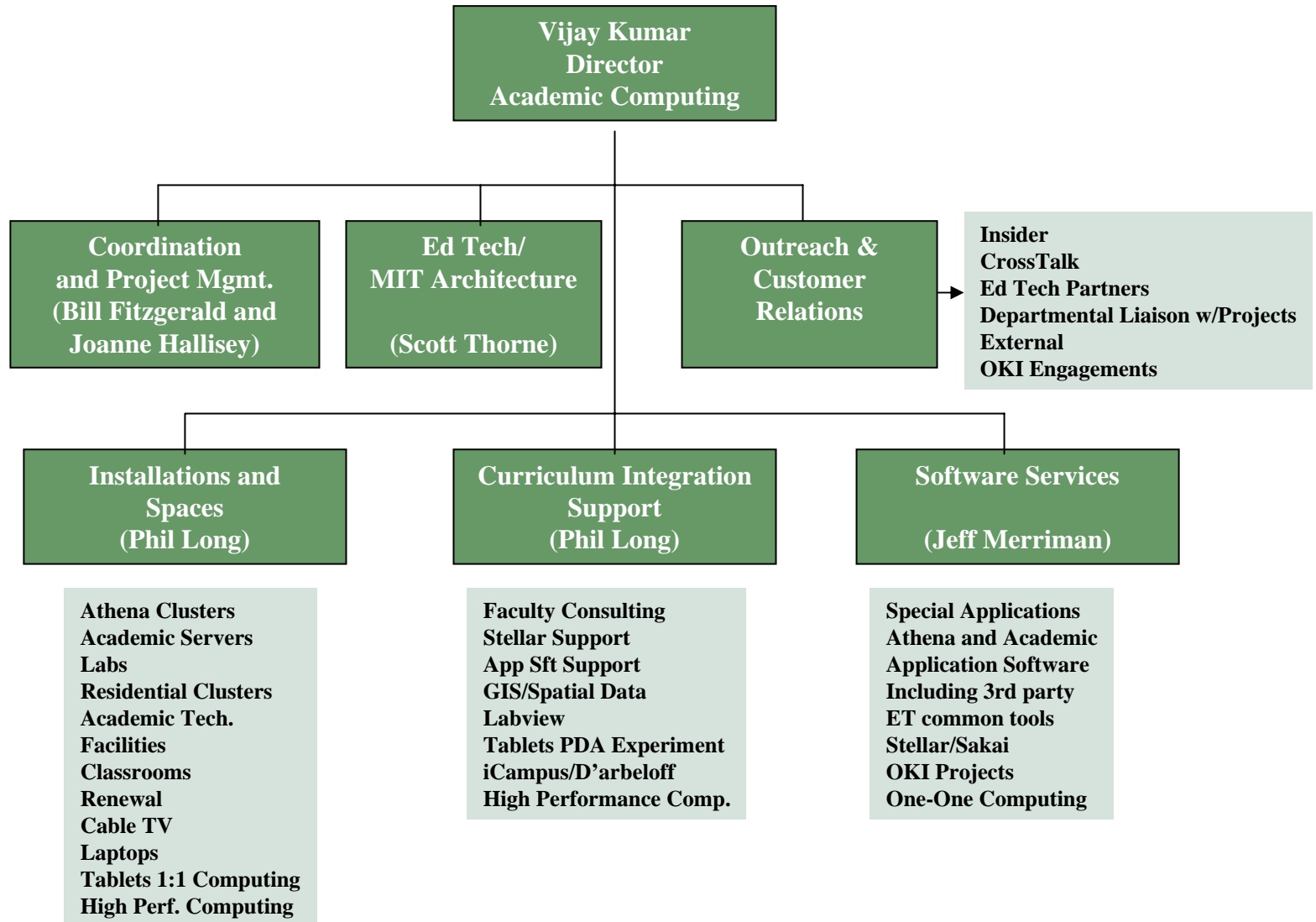
- **AAC-II**
- **Academic Council**
- **AIM**
- **AMPS Advisory**
- **Administration Services Policy Coordinating Council**
- **Council on Educational Technology**
- **Education Technology Partners**
- **Help Services Advisory**
- **I-Campus Steering Committee**
- **Information Technology Coordinating Council (new)**
- **IT Leaders**
- **IT Partners**
- **SAPbiz**
- **Stellar Advisory Group**
- **User Group Leaders**

# Institute-Wide IT Budget

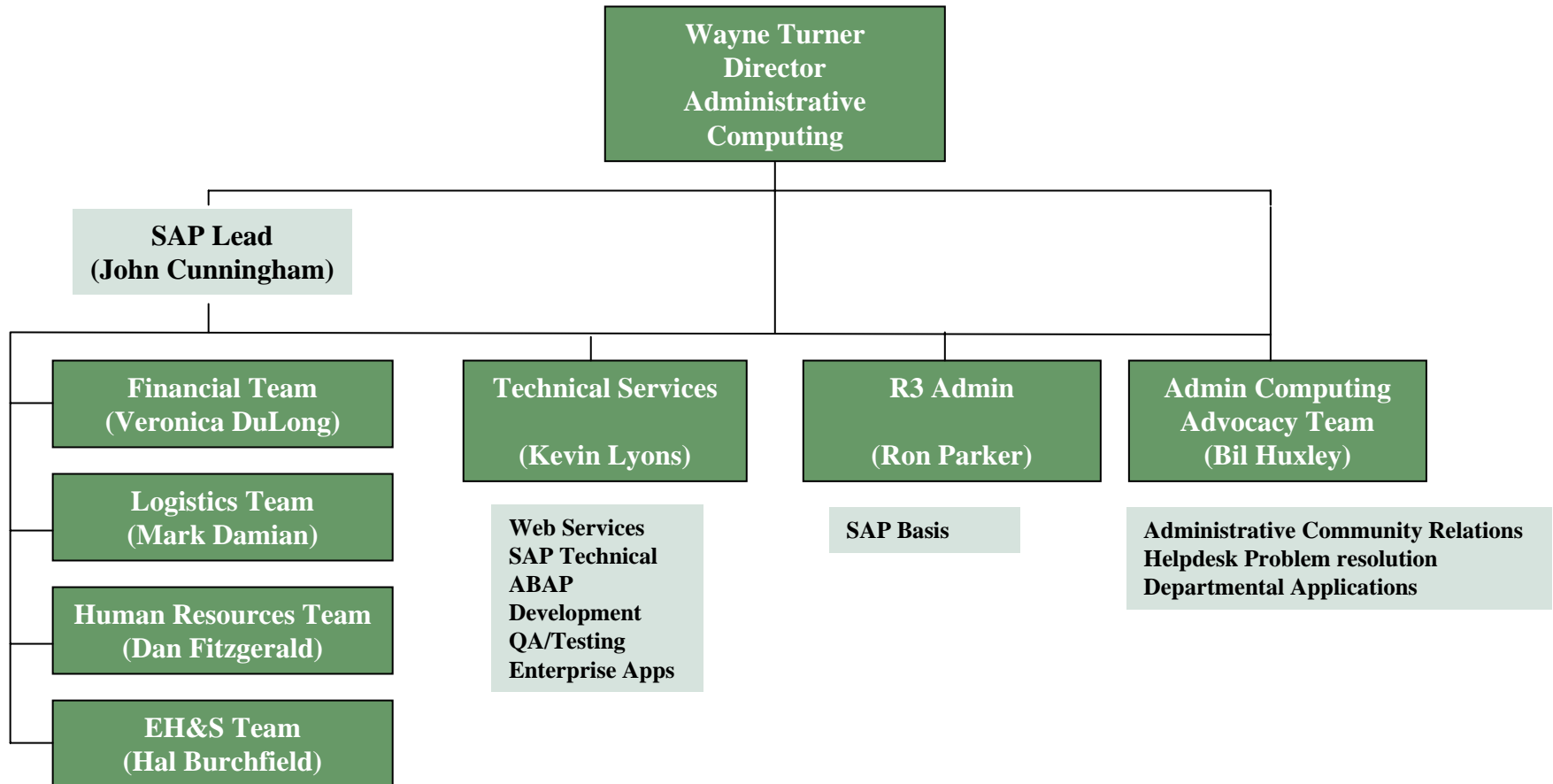
**Institute-Wide Gross IT Budget = \$100M (est.)**



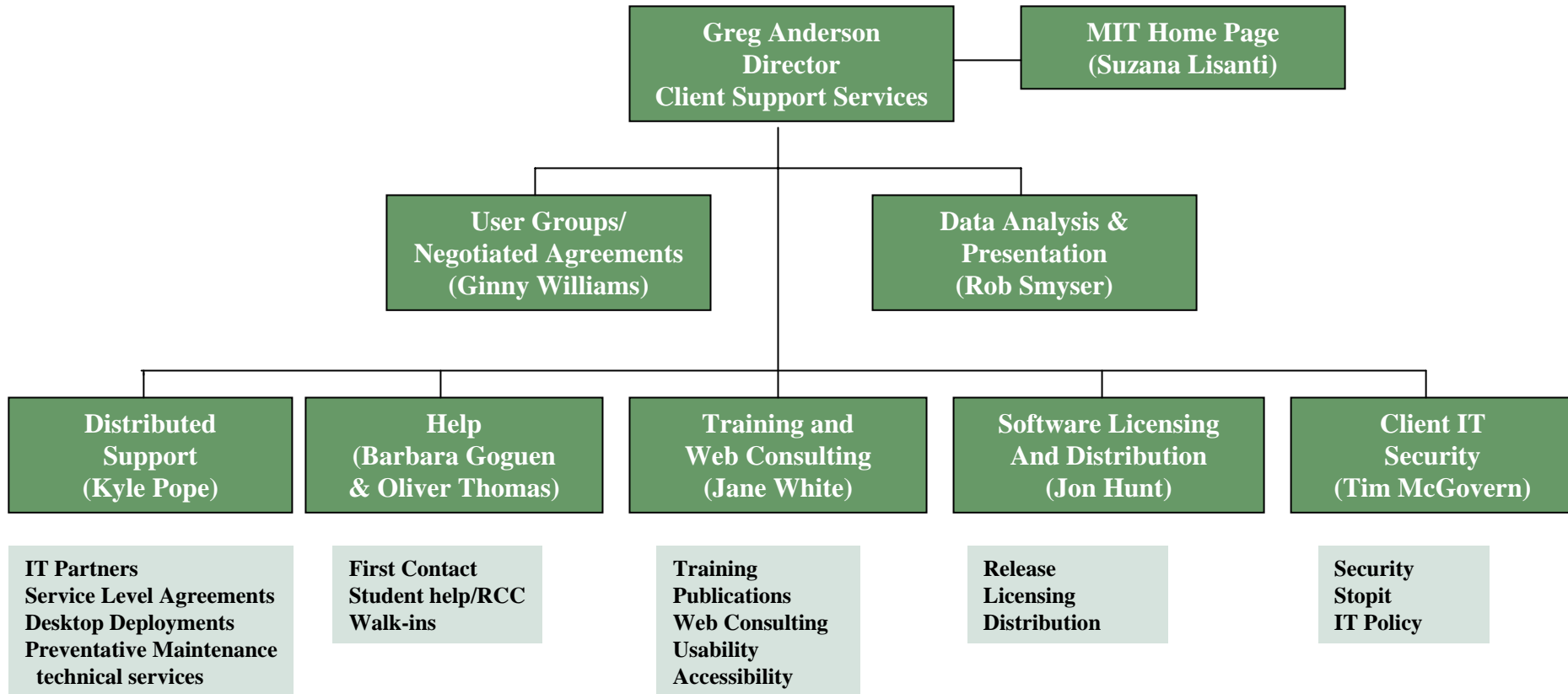
# Academic Computing



# Administrative Computing



# Client Support Services



# Operations and Infrastructure Services

**Theresa Regan**  
**Director**  
**Operations & Infrastructure**

## **Infrastructure Software Development & Maintenance**

**Data Warehousing &  
Administrative Services**  
(Mary Weisse)

**Data Admin Consultations**  
**Data Modeling**  
**System Design Review**  
**Design, maintain & expand the  
Data Warehouse**  
**User support and specialized  
training in Brio Query and use  
of the Data Warehouse**  
**Create and distribute standard  
report templates for warehouse  
users**

**Infrastructure Applications  
Team**  
(Susan Starr)

**Provide administration, maintenance  
configuration, installation and  
upgrades for enterprise-wide  
infrastructure applications including:**  
**Central Print**  
**IXOS Image archiving system**  
**EDI (Electronic Data Interchange)**  
**Credit Card Processing**  
**Request Tracker (RT)**

**Software Development &  
Integration Team**  
(Marshall Vale)

**Athena environment for UNIX development**  
**Kerberos development**  
**WIN Domain development**  
**Platform Commons technical liaisons**  
**Native application development assistance**

# Operations and Infrastructure Services

Theresa Regan  
Director  
Operations & Infrastructure

## Network Services

MIT Network Manager  
(Jeff Schiller)

Network Architecture  
External Connectivity  
and Relations  
Internal Standards  
Network and Information  
Security

Network Strategies  
(Brian Shannon)

Network infrastructure  
planning  
IS&T outside plant  
planning and installation  
IS&T outside plant  
maintenance, relocation  
and coordination

Network & Infrastructure  
Services  
(Mark Silis)

WIN.MIT.EDU Ctrl Window Domain  
Citrix Virtual Windows application  
environment  
Techtime - campus calendar  
MIT Online Directory  
MIT Mail Svcs (routing, Mailman  
list svcs, post office mail storage,  
spam management tools)  
MIT Web Services (WebMail,  
central web svr, campus search engine)  
MIT.EDU Namespace (Domain  
Name System (DNS), MIT ID Sys.)  
Authentication & Authorization  
(Kerberos, X.509 server & personal  
certificates)  
MIT Network (external connectivity,  
campus backbone, connectivity to  
remote MIT sites)  
MIT Remote Access Services (Tether,  
Ipass, VPN)

Telecommunications &  
Network Installation Services  
(Andrew Bonvie)

Physical Layer Consulting  
Jack Installations  
MITnet Activations  
Wireless Installations  
Fiber Circuit Installation  
IP Addressing  
Network Upgrades  
Network Troubleshooting  
IS&T Physical Layer  
Maintenance and Repair

# Operations and Infrastructure Services

Theresa Regan  
Director  
Operations & Infrastructure

## Operations Services

Data Center  
Operation Services  
(Karen Fortoul)

Management of W91 data center including environmental monitoring and physical security  
Server Management - hardware de/installation, console monitoring, tape mounting for backups  
Print services  
Production jobs on mainframe  
Co-location services

Server Operations  
Team  
(Harold Pakulat)

Installs and maintains centrally managed servers and software  
Supported environments, technologies & software include Solaris, TRU64, VMS, LINUX, SAN, RAID, Athena, Oracle and Apache

VM Systems  
Services  
(Karen Fortoul)

Maintain MITVMA/C systems for Admin clients on the IBM mainframe  
TSM Backup service  
LISTSERV mailing list service

# Telephony & IS&T Shared Services

Allison Dolan  
Director  
Telephony &  
IS&T Shared Services

## Shared Services

Competency  
Group  
(Ed Dolan)

Administrative  
Services  
(Jean Greene)

Financial  
Services  
(Angie Milonas)

Staffing (hiring,  
terminations &  
employee changes)  
Employee Relations  
Staff Development  
Organizational  
Design

Facilities  
Management  
Meeting &  
travel arrangements

Budgeting  
Process & monitoring  
transactions  
Financial analysis &  
consulting  
Reporting  
Forecasting  
Modeling

## Telephony Services

5ESS  
Operations  
(Louise Keohane)

Telephone  
Client Support  
(Jana Tarasenko)

Telephone  
Information Center  
(Diane Catalano)

Management of  
5E switch  
Voice mail  
Carrier provisioning

Help Desk  
Moves, adds &  
changes  
Billing

Telephone operators  
Directory Assistance  
NameConnector  
Audio bridge  
reservations