



The Evolution of IT Governance at the Hutchinson Center: **A Case Study**

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CANCER RESEARCH CENTER**

A LIFE OF SCIENCE



Disclaimers

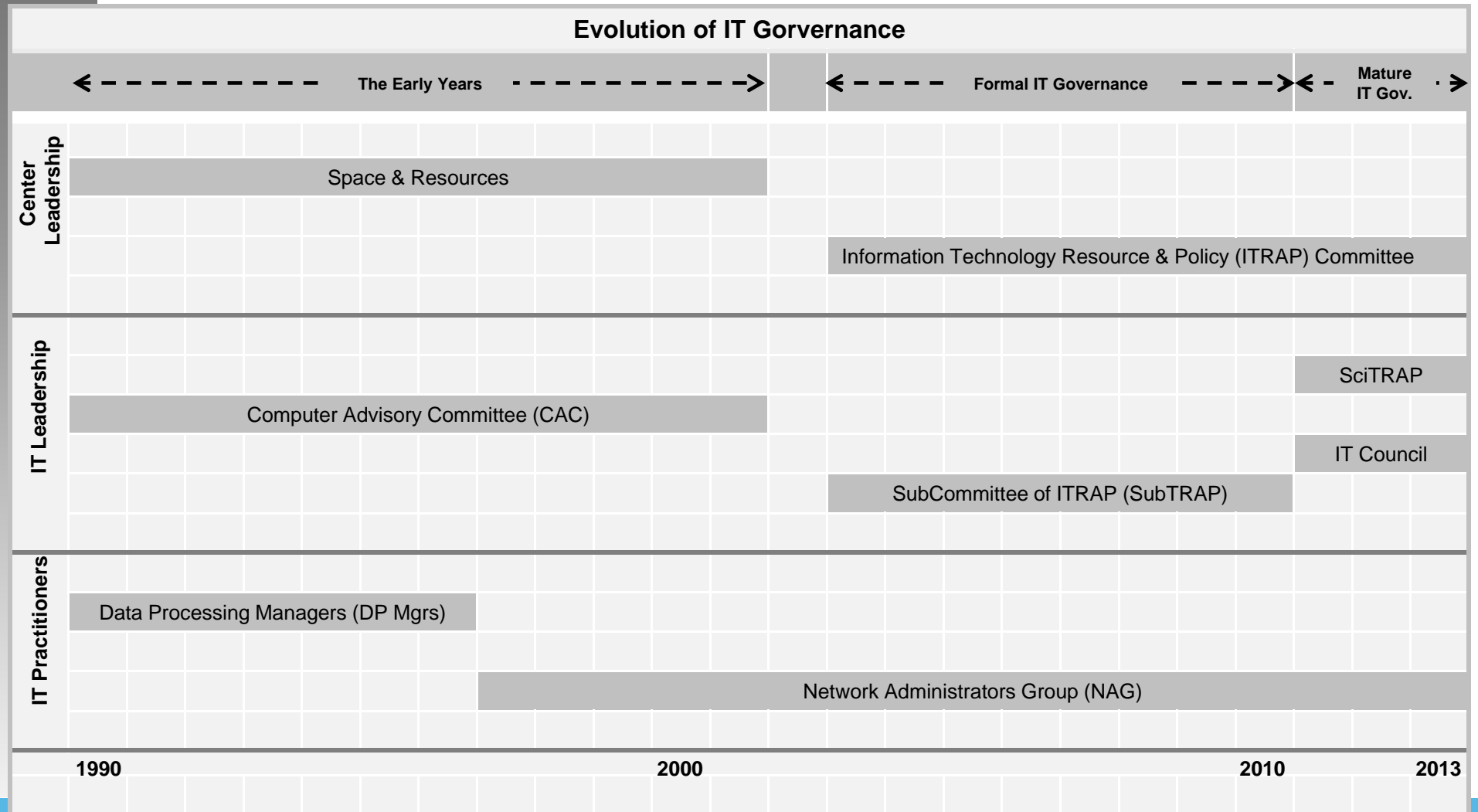
- ❑ Story of how IT governance has developed @ Hutchinson Center
- ❑ Heavily influenced by my personal perspective
- ❑ Plenty of room for alternate interpretation & contradictory opinions
- ❑ More interested in spurring a discussion than providing the One True Answer



Hutch Overview

- ❑ Non-Profit Independent Research Institution
- ❑ 215 Faculty, 2,800 Employees
- ❑ FY11 Budget of \$380M, \$316M from Grants
- ❑ 250 IT Staff in 20+ Different IT Shops
- ❑ 2,000 Desktops, 400 Laptops, 60/30/10 Win/Mac/Other
- ❑ 8 Data Centers, Consolidated Storage, vCoLo
- ❑ PeopleSoft (Finance & HR), Exchange/Zimbra, SharePoint

Evolution of IT Governance





The Early Days

Multiple committees:

- ☐ Space & Resources
- ☐ Computer Advisory Committee,
- ☐ DP Managers, and
- ☐ Network Administrators Group (NAG)

Informal charters

Ad Hoc representation

No clear relationship between committees

Mostly faded away by ~2001



Space & Resources

Role: Sounding board for resource allocation – lab space, budgets, policies, services

Who: Scientific & administrative leadership from each scientific division

Freq: Quarterly or as needed

Example: Homegrown financials -> People Soft (1998)



Computer Advisory Committee

- Role:** Sounding board for computer-related policies, standards, and budgets
- Who:** VPIT, CFO, Selected IT Leaders (Shared Resources, Clinical Research, Public Health Sciences, Library, Administration). Rotating chair w/one year term
- Freq:** Monthly
- Example:** cc: Mail -> hybrid Exchange/IMAP (1997)



Data Processing Managers

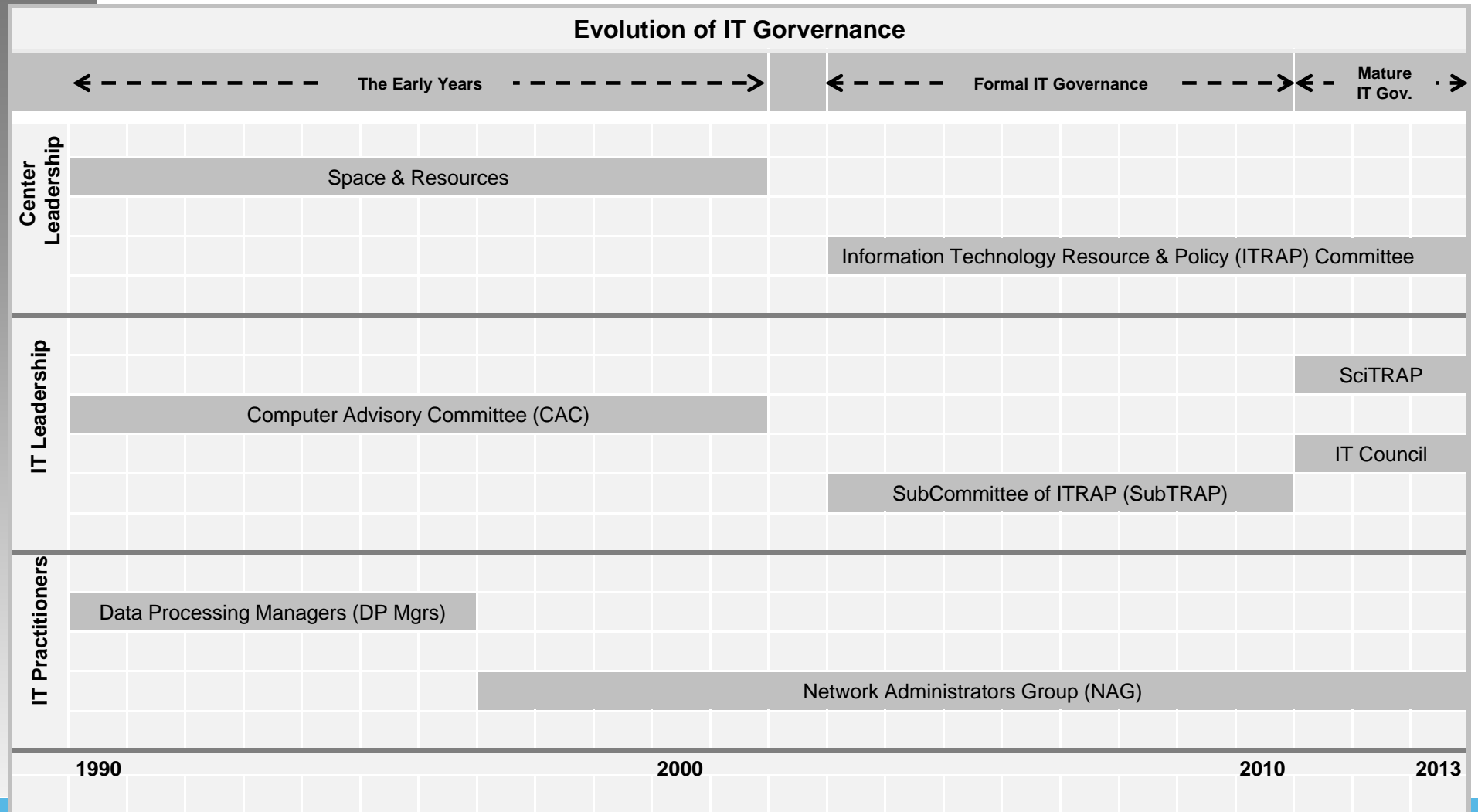
- Role:** Technical standards, operational issues
- Who:** Hands-on technical staff from around the Center
- Freq:** Monthly
- Example:** Quibble over standard for 8 character userids (perennial)



Network Administrators Group (NAG)

- Role:** Informal communications forum between centralized IT and distributed IT support staff
- Who:** Interested IT support staff, managed by divisional IT support staff
- Freq:** 2 x monthly
- Example:** Socialize upcoming changes, solicit project suggestions, training

Evolution of IT Governance





Formal IT Governance

Multiple committees:

- ❑ Information Technology Resource & Policy Committee (ITRAP),
- ❑ SubCommittee of ITRAP (SubTRAP), and
- ❑ Network Administrators Group (NAG)

Formal charters

Intentional representation (~80% of the IT users @ the Center)

Better defined relationship between committees

Grew out of a need for an approval body for HIPAA – related security policies



ITRAP

- Role:** Review & approve Center-wide policies, practices, and resource allocations for information technology systems and services
- Who:** IT savvy scientific leadership & senior administrative staff. Scientific SVP chair w/IT support
- Freq:** Quarterly
- Example:** Exchange reliability



Information Technology Resource and Policy Committee (ITRAP-C)

Purpose: Review and approve center-wide policies, practices, and resource allocations for information technology systems and services.

Frequency of Meetings: Quarterly

Membership: Committee membership is comprised of the Space & Resources Computing Sub-Committee and a small number of senior administrative staff. Additional members may be brought in for specific issues. Committee membership will be adjusted as time and needs dictate, and the initial members will be:

Name	Division
Barb Trask – Committee Chair	Human Biology
Georg Luebeck	Public Health Sciences
Ziding Feng	Public Health Sciences
Dan Geraghty	Clinical Research Division
Steve Henikoff	Basic Sciences
Gary Schoch	Clinical Research Division
Steve Self	Public Health Sciences
Barry Stoddard	Basic Sciences
Kathy Tietje	Public Health Sciences
Tom Vaughan	Public Health Sciences
< to be determined >	Human Biology
Janell Baldwin	Shared Resources
Randy Main	Administration
Han Nachtrieb	Administration
Bob Robbins	Administration
Myra Tanita	Administration

Communication: Committee decisions will be communicated to Senior VPs, Space & Resources, Senior Staff, and the technical community (e.g., the Network Administrators Group) as appropriate.

Management: Barb Trask chairs the committee and staff support is provided by the Administration division's Information Technology department ("Center IT"). The initial meeting coordinator will be Ron Hood, Information Security Officer.

Relationship to Other Groups: ITRAP does not replace or preempt other center forums for technical discussions and decisions such as Senior Staff, Space & Resources, the Network Administrators Group (NAG), and the PHS Technical Advisory Committee (TAC). Where appropriate, these groups may refer issues to ITRAP for resolution and ITRAP, in turn, may hand decisions off to these groups for publication or implementation.



SubTRAP

- Role:** To assist and guide the development of Center-wide policies, practices, multi-year plans, and resource allocations for IT systems and services
- Who:** Selected IT leadership from each division
- Freq:** Weekly
- Example:** Annual budgeting, consolidated storage

Information Technology Resource and Policy Sub-Committee (SubTRAP): Final Charter

June 2008

Purpose:

To assess and guide the development of Center-wide policies, practices, multi-year plans and resource allocations for information technology (IT) systems and services.

Goal:

SubTRAP is a major contributor to IT Governance activities at the Center. SubTRAP ensures that the Information Technology Resource and Policy (ITRAP) committee has the information it needs to make informed decisions on essential areas that achieve Center-wide IT objectives.

Frequency of Meetings:

Weekly or as often as needed to accomplish its duties.

Membership:

SubTRAP is comprised of technical representatives from the Administrative and Scientific Divisions, representing approximately 80% of IT resources at FHCRC. Members (Exhibit A) are selected on the basis of their knowledge and expertise in understanding the impacts of IT on all administrative and scientific operations. Additional personnel may be invited to participate in meetings related to non-technical issues (i.e. Finance, Legal Services, Internal Audit). Committee members will be adjusted as time and needs dictate.

Responsibility:

(Under the authority of ITRAP)

- Advise on the selection of technology and architecture
- Monitor IT resource and priority conflicts
- Forecast IT initiatives to ensure current needs are met and future growth is planned for
- Perform project portfolio reviews for continuing relevance
- Define project success measures, acquire and assign project resources
- Fulfill project Sponsorship role to ensure project plans deliver expected value and desired outcomes
- Manage IT capital budget, decide how costs for equipment will be allocated and prioritized

**Communication:**

SubTRAP works iteratively with ITRAP to bring awareness to issues, provide input, recommendations, and to review and amend recommendations as necessary (Exhibit B).

Decision Making Process:

SubTRAP's decision making process is consensus based. Issues that cannot be resolved by consensus will be clarified and taken to ITRAP for further discussion and resolution.

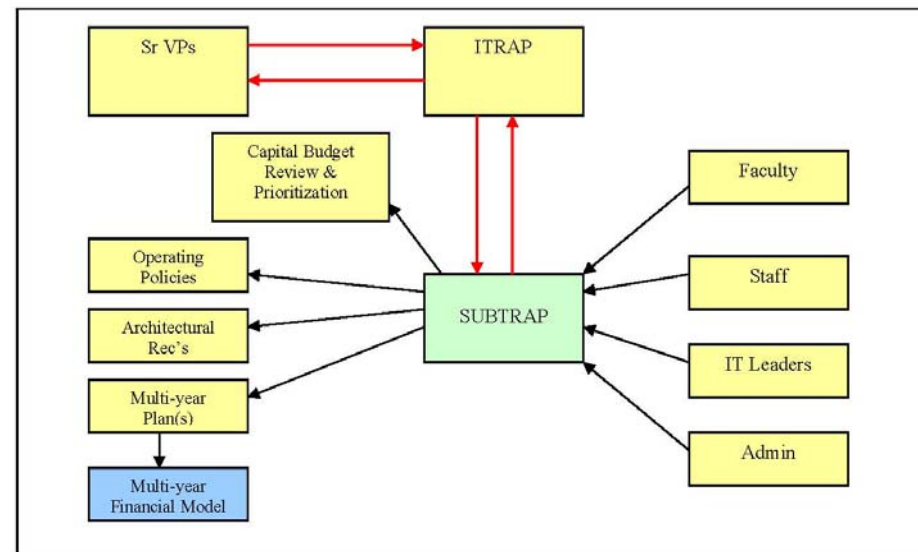
Management:

Ron Hood, Security and Architecture Manager, chairs the committee and staff support is provided by the Administration division's Information Technology department ("Center IT"). The meeting facilitator is Karyn Payne, Project Manager.

Relationship to Other Groups:

SubTRAP reports to ITRAP. SubTRAP does not replace or preempt other Center forums for technical discussions and decisions such as Senior Staff, the Network Administrators Group (NAG), and the PHS Technical Advisory Committee (TAC). Where appropriate, these groups may refer issues to SubTRAP for resolution and SubTRAP, in turn, may either bring recommendations to ITRAP for a decision or hand decisions off to these groups for publication or implementation.

ITRAP/SubTRAP Relationships and Work Efforts





ITRAP & SubTRAP Representatives for FHCRC Divisions June 2008			
Division	Division Administrator	ITRAP Representative	SubTRAP Representative
Basic Sciences	Rose Beer	Steve Henikoff	Pat Heath
Human Biology	Laima Abele	Barbara Trask	Pat Heath
Public Health Sciences	Rosemarie Keenan	Robert Gentleman Charles Kooperberg Martin McIntosh Tom Vaughn	Dirk Petersen Charles Trakamsilpa
Clinical Research Division	Agnes O'Connor	Dan Geraghty Gary Schoch	Gary Schoch
Administration	Myra Tanita	Janell Baldwin Randy Main Han Nachtrieb Bob Robbins	Ron Hood Sonja Outlaw Tim Hunt
VIDI (SCHARP/HVTN)	Banks Warden	Steve Self Thomas Skillman	Wolfe Maykut Roy Obenchain

Exhibit A



SubTRAP Technical Analysis Process June 2008

Goal

Provide a process for involving SubTRAP in accommodating the growth of technical items that require infrastructure resources.

ITRAP/PI/ Division Admin

- Identifies project or initiative that will require substantial Center technology resources (storage, facilities, high power computing, networks, data center).
- Contacts SubTRAP Representative.



SubTRAP Representative

- Discusses project scope at SubTRAP meeting and solicits questions and comments from committee.
- Works with stakeholders to develop proposal.



SubTRAP

- Review Proposal.
- Either additional work is required or proposal is approved by SubTRAP representative.
- Forwards on to ITRAP/PI/Division Administrator.

Proposal Development:

- May involve feedback from SubTRAP on what is required in the proposal (i.e. technical policies/procedures).
- May leverage the work and expertise of previously developed technical teams.
- May need information from other labs, staff, outside sources i.e. UW.
- May require engagement of a working group with SubTRAP sponsorship.
- Parallel discussion between PI and SubTRAP representative.



ITRAP/PI/ Division Admin

- Option(s) reviewed and approach selected.
- ITRAP/PI/Admin confirms final decision with SubTRAP representative.

Note: SubTRAP does not have budget authority to distribute or allocate funds.



SubTRAP Representative

- Once approved respond to requesting PI/Admin.
- Works with Center resources to develop SLA/OLA as needed.

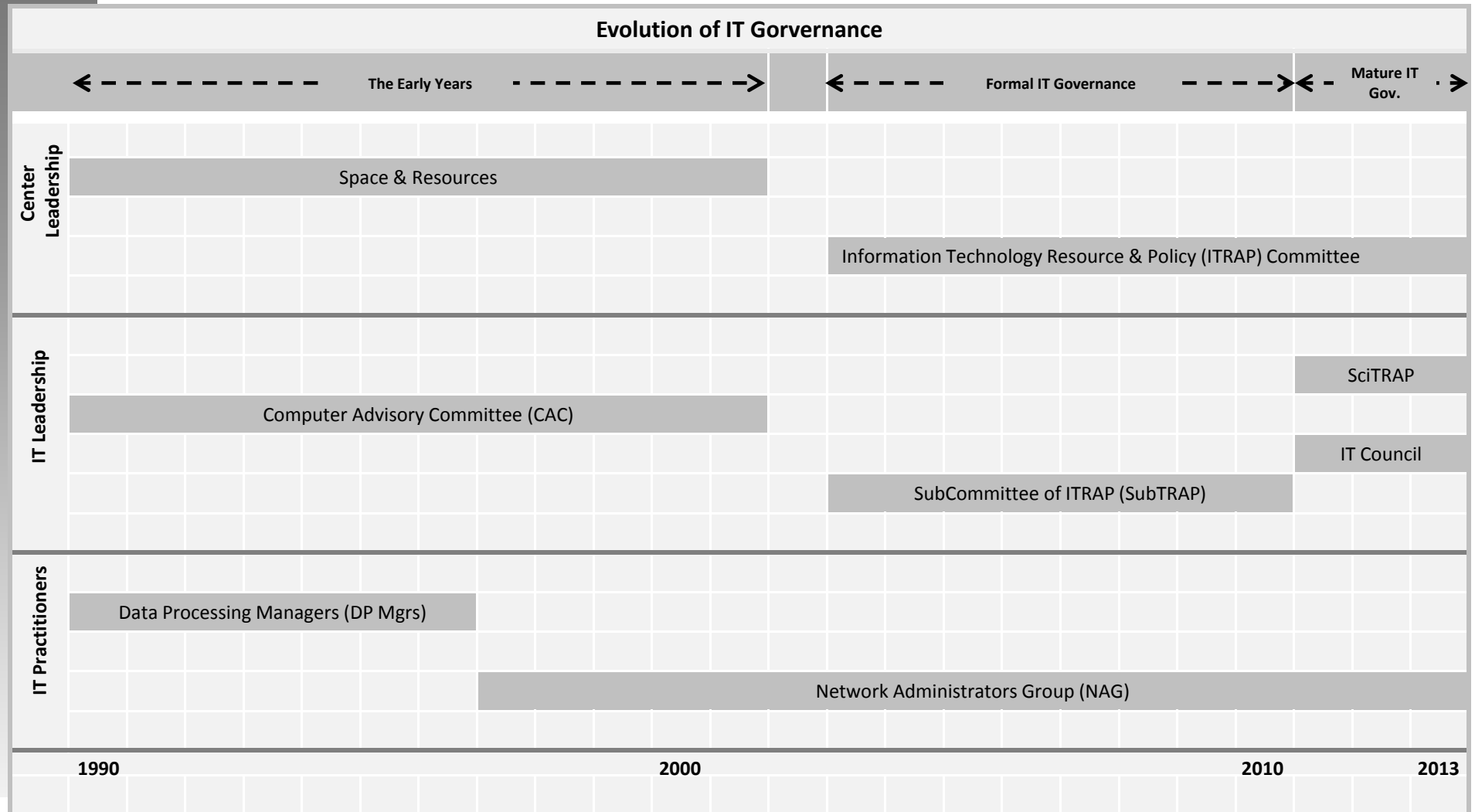
Exhibit B



Network Administrators Group (NAG)

- Role:** Informal communications forum between centralized IT and distributed IT support staff
- Who:** Interested IT support staff, managed by divisional IT support staff
- Freq:** 2 x monthly
- Example:** Socialize upcoming changes, solicit project suggestions, training

Evolution of IT Governance





Mature IT Governance

Multiple committees:

- ☐ Information Technology Resource & Policy Committee (ITRAP)
- ☐ IT Council,
- ☐ SciTRAP, and
- ☐ Network Administrations Group (NAG)

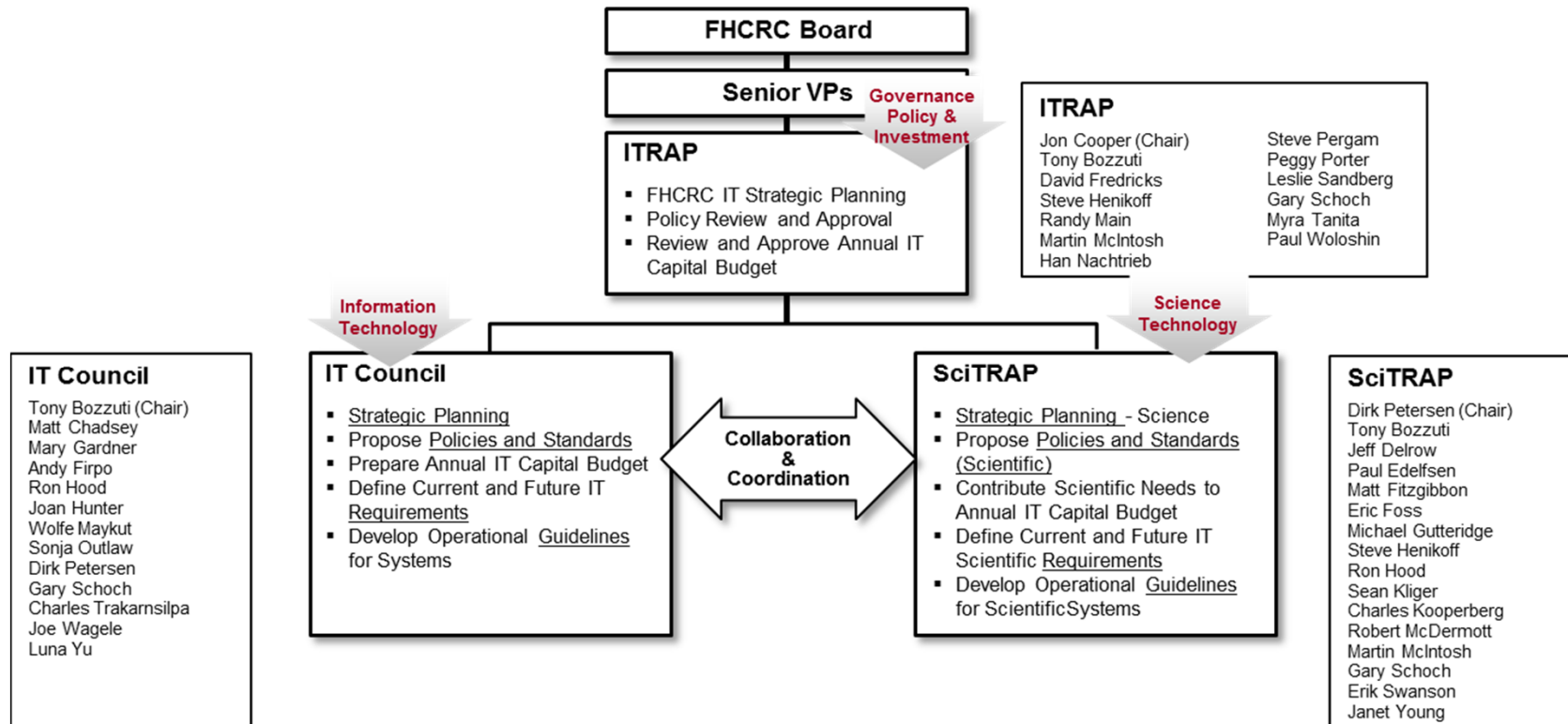
Formal charters

Formal representation

Well defined relationship between committees

IT Governance Model

August 2012





ITRAP

- Role:** The ITRAP committee leads a Center-wide effort to gain maximum value from IT investments and to ensure those investments are aligned with Center Strategic objectives through planning and policy development, annual budget review and approval, and spending review and oversight
- Who:** Faculty & senior administrative staff
- Freq:** Bi-Monthly
- Example:** Data warehouse

Information Technology Resource and Policy Committee (ITRAP):

May 2011

Purpose:

The Information Technology Resource and Policy (ITRAP) committee leads a Center-wide effort to gain maximum value from IT investments and to ensure those investments are aligned with Center strategic objectives through planning and policy development, annual budget review and approval, and spending review and oversight.

Frequency of Meetings:

Every 2 months

Membership (Exhibit A):

ITRAP is comprised of Faculty and Senior Administrative Staff. Members are selected by the Senior VP's on the basis of their ability to ensure that IT governance issues reach the appropriate levels of scientific and administrative leadership. Additional advisors may be invited to participate in meetings as required (e.g., Information Technology, Internal Audit, Legal Services, and Finance). Committee membership will be adjusted as time and needs dictate.

Responsibility:

To ensure IT resources are developed and delivered with maximum effectiveness in a manner consistent with the Center's scientific and technological strategic objectives and budgetary constraints. Specifically:

- Review and approve IT capital-budget spending.
- Review and approve selection of Center-wide technology, architecture and security initiatives.
- Review and approve Center-wide IT policies
- Monitor ITRAP project portfolio, provide guidance and assign resources when necessary.
- Ensure project portfolio continuously meets strategic requirements of the Center.
- Monitor and balance resource and priority to best meet Center direction.
- Make recommendations and request changes to strategic plans (e.g., priority, funding, technology approaches, and resources).
- Convene working groups (i.e. SubTRAP, SciTRAP)

Communication:

Committee decisions will be communicated to Senior VPs, Senior Staff, and the technical community (e.g., the Network Administrators Group) as appropriate.

**Decision-Making Process:**

ITRAP strives to achieve consensus in making its decisions. Additional information will be sought for controversial issues. In most cases, SubTRAP and/or SciTRAP will be asked to provide ITRAP with additional information in order to help make a decision. If consensus cannot be achieved, the issue will be forwarded to the Senior VP's for final decision.

Management:

Jonathan Cooper, Senior Vice President of the Basic Sciences Division, chairs the committee and staff support is provided by the Administration Division's IT department ("Center IT"). The meeting facilitator is Joan Hunter, Center IT Projects and Business Operations Manager.

Relationship to Other Groups (Exhibit B):

ITRAP reports to the Senior Vice Presidents. ITRAP obtains input from SubTRAP and other relevant committees to inform IT strategy development and implementation. ITRAP is aligned with board-related IT governance decisions and oversees management's execution of them.

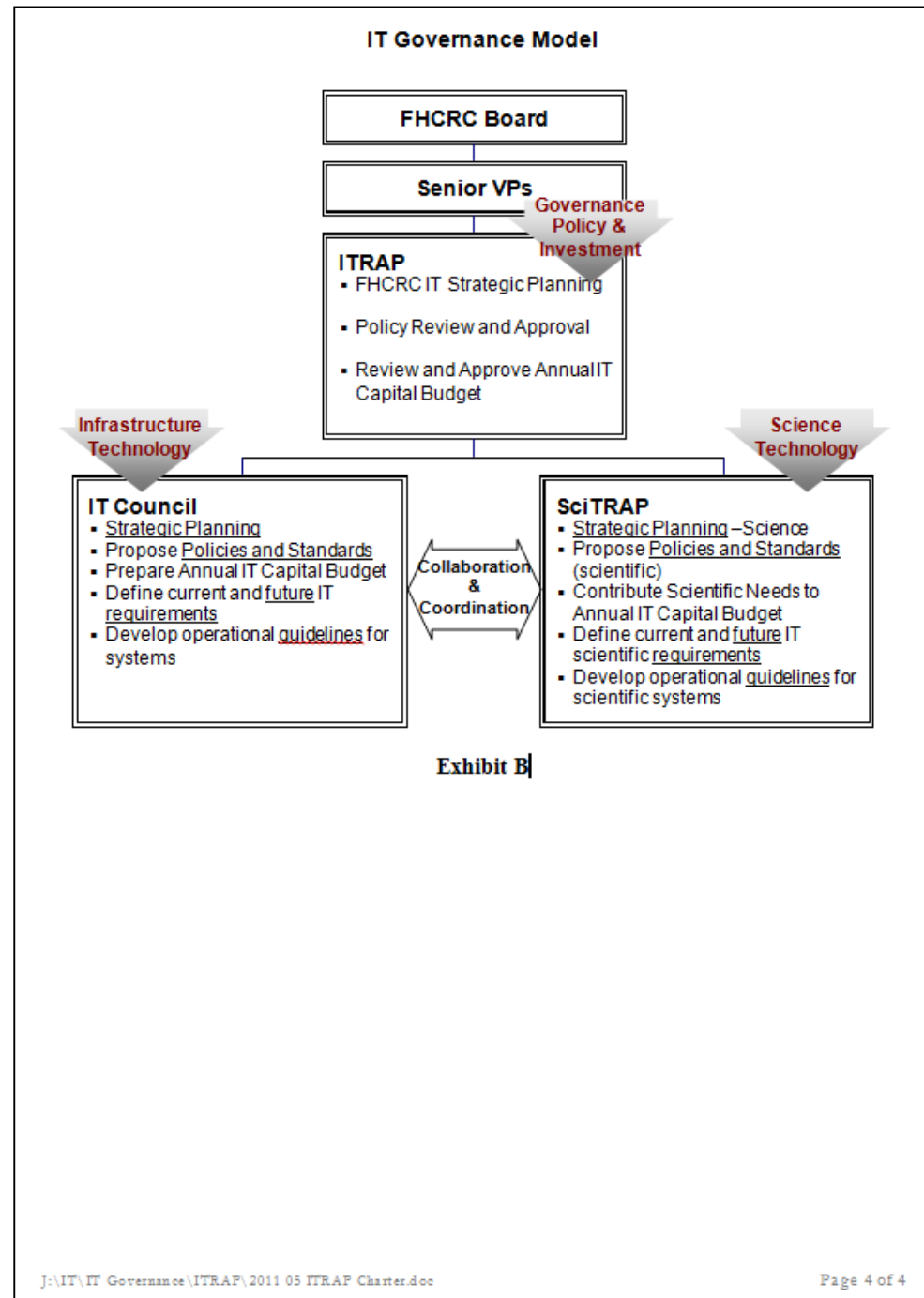


IT Governance Representatives for FHCRC Divisions May 2011			
Division	ITRAP Representative	SubTRAP Representative	SciTRAP Representative
Basic Sciences	Jon Cooper (Chair) Steve Henikoff	Luna Yu	Steve Henikoff
Human Biology	Peggy Porter	Luna Yu	Janet Young
Public Health Sciences	Marty McIntosh Steve Schwartz	Charles Trakarnsilpa	Charles Kooperberg Marty McIntosh Matt Fitzgibbon
Clinical Research Division	Mandy Paulovich Gary Schoch	Gary Schoch	Antonio Bedalov Gary Schoch
Administration	Myra Tanita (COO) Tony Bozzuti (IT) Randy Main (Finance) Paul Woloshin (Shared Resources) Han Nachtrieb (HR)	Ron Hood (Chair) Matt Chadsey Andy Firpo Mary Gardner Joan Hunter Sonja Outlaw Dirk Petersen Ray Salas Joe Wagele	Dirk Petersen (1 st Chair) Ron Hood Tony Bozzuti Jeff Delrow Michael Gutteridge Sean Kliger Robert McDermott Erik Swanson
VIDD	David Fredricks Banks Warden	Wolfe Maykut	Peter Gilbert Paul Edliefsen

Exhibit A

J:\IT\IT Governance\ITRAP\2011 05 ITRAP Charter.doc

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IT Council

- Role:** To assist and guide the development of Center-wide policies, practices, multi-year plans, and resource allocations for IT systems and services
- Who:** IT representatives from each division
- Freq:** Semi-Monthly
- Example:** Win7 Upgrade, Enterprise GPOs



IT Council Charter:

February 2012

Purpose:

To assess and guide the development of Center-wide policies, practices, multi-year strategic plans, and resource allocations for information technology (IT) systems and services.

Goal:

The IT Council is a major contributor to IT Governance activities at the Center. The IT Council ensures that the Information Technology Resource and Policy (ITRAP) committee has the information it needs to make informed decisions on essential areas that achieve Center-wide IT objectives.

Frequency of Meetings:

Two times a month or as often as needed to accomplish its duties.

Membership (Exhibit A):

IT Council membership is approved by ITRAP. Members are selected on the basis of their divisional/functional IT leadership, role, knowledge and expertise. Additional personnel may be invited to participate in meetings. Committee members will be adjusted as time and needs dictate.

Responsibility:

(Under the authority of ITRAP)

- Support division IT needs
- Advise on the selection of technology and architecture
- Support the development of IT strategic roadmaps
- Monitor IT resource and priority conflicts
- Drill-down and resolve tactical issues as appropriate
- Forecast IT initiatives to ensure current needs are met and future growth is planned
- Perform project portfolio reviews for continuing relevance and priority
- Review and approve IT investments and present to ITRAP
- Define project success measures, acquire and assign project resources
- Fulfill project sponsorship role to ensure project plans deliver expected value and desired outcomes
- Manage IT capital budget, decide how costs for equipment will be allocated and prioritized
- Review and revise IT policies
- Act as focal points for IT communication
- Alignment of IT solutions to common needs
- Create transparency to division specific IT efforts and review for enterprise opportunity

**Communication (Exhibit B):**

The IT Council works iteratively with ITRAP to bring awareness to issues, provide input, recommendations, and to review and amend recommendations as necessary.

Decision Making Process:

The IT Council's decision-making process is consensus-based. Issues that cannot be resolved by consensus will be clarified and taken to ITRAP for further discussion and resolution.

Management:

The Vice President of IT chairs the committee and staff support is provided by the Administration division's Information Technology department ("Center IT"). The meeting facilitator is the manager of Center IT Projects and Business Operations.

Relationship to Other Groups

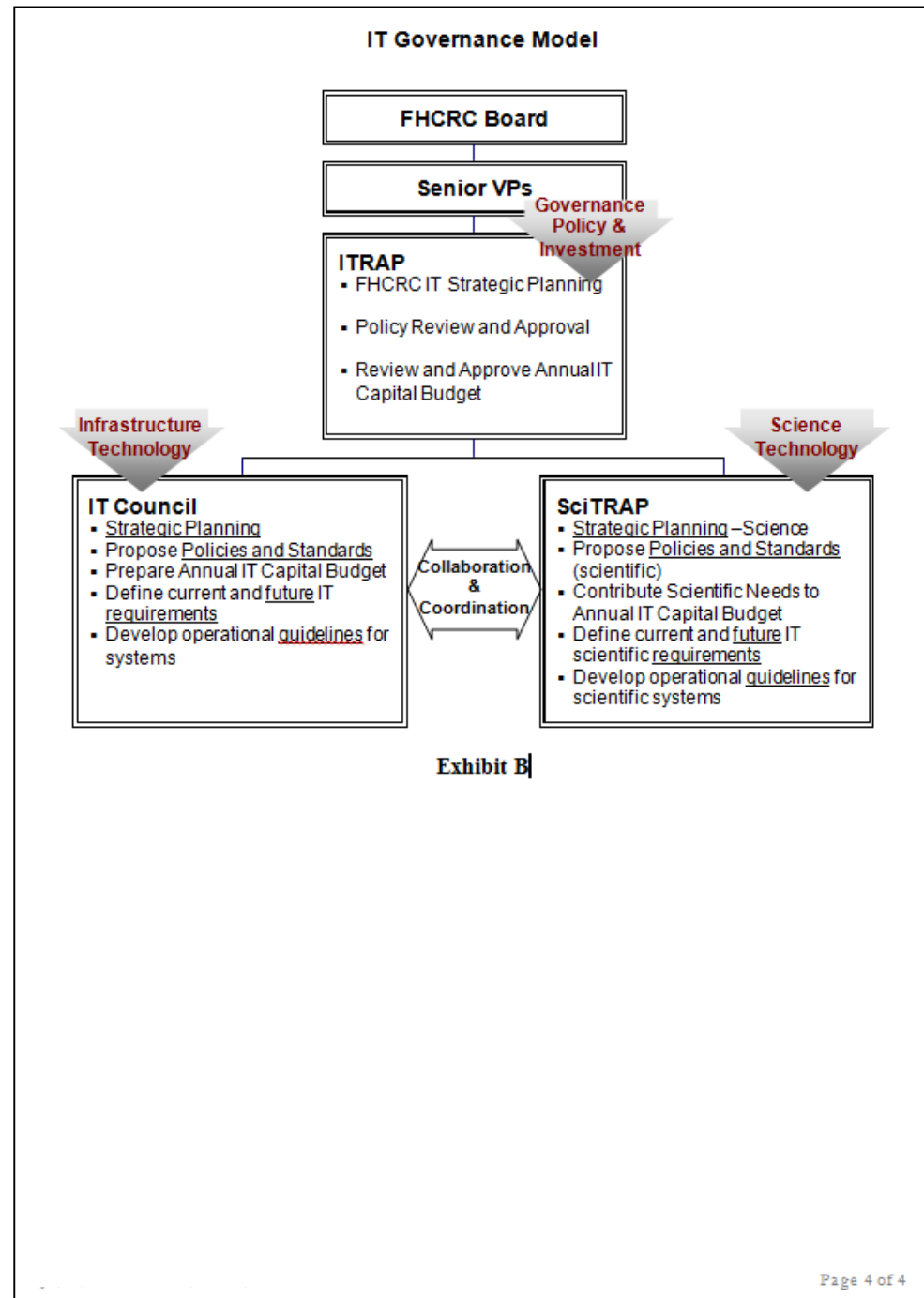
The IT Council is the senior most IT group below ITRAP. The IT Council partners with SciTRAP in the development of scientific IT requirements.



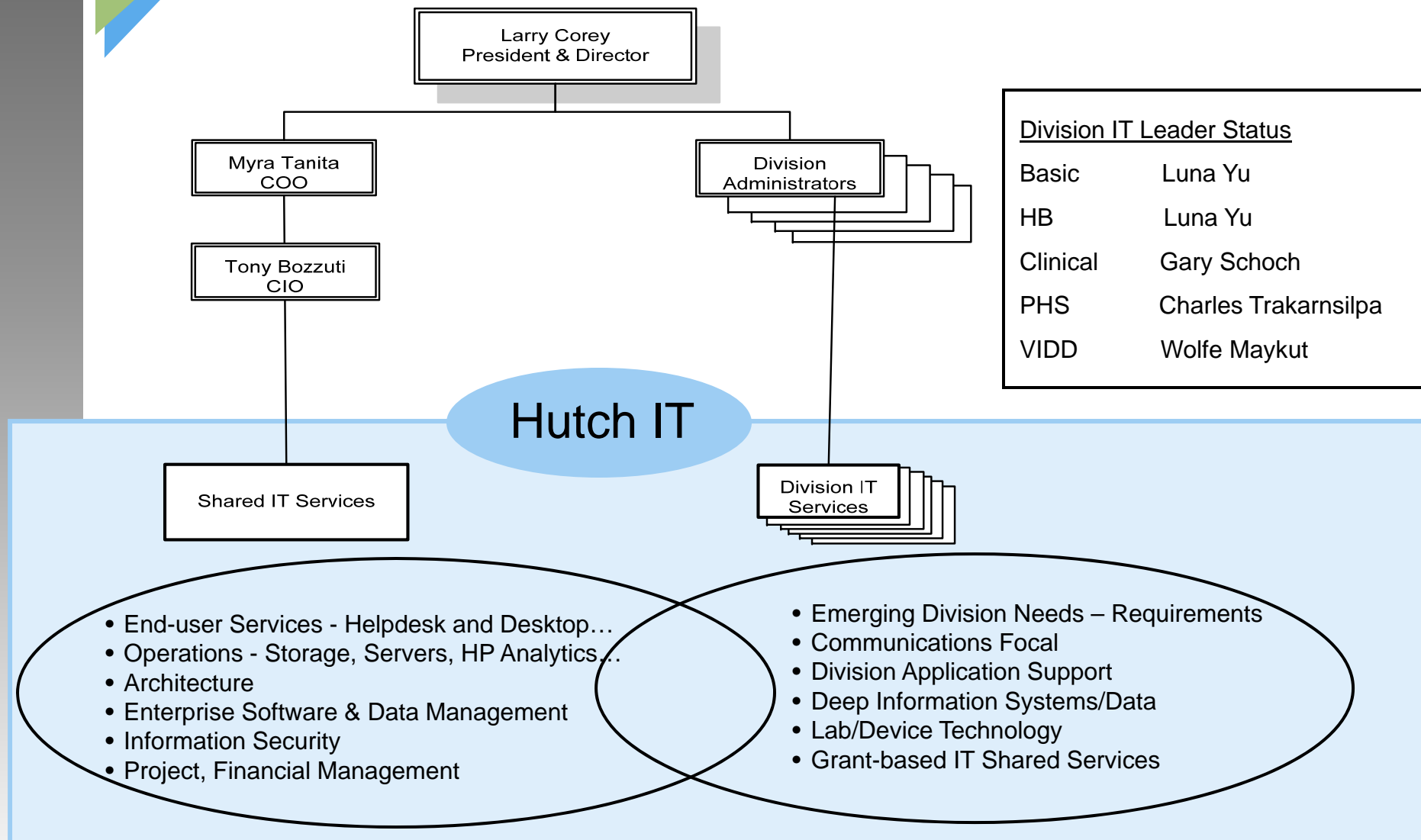
Exhibit A

IT Governance Representatives for FHCRC Divisions February 2012			
Division	ITRAP Representative	IT Council Representative	SciTRAP Representative
Basic Sciences	Jon Cooper (Chair) Steve Henikoff	Luna Yu	Steve Henikoff
Human Biology	Peggy Porter	Luna Yu	Janet Young
Public Health Sciences	Marty McIntosh Steve Schwartz	Charles Trakarnsilpa	Charles Kooperberg Marty McIntosh Matt Fitzgibbon
Clinical Research Division	Mandy Paulovich Gary Schoch	Gary Schoch	Antonio Bedalov Gary Schoch
Administration	Myra Tanita (COO) Tony Bozzuti (IT) Randy Main (Finance) Paul Woloshin (Shared Resources) Han Nachtrieb (HR)	Tony Bozzuti (Chair) Matt Chadsey Mary Gardner Ron Hood Joan Hunter Sonja Outlaw Dirk Petersen Joe Wagele Andy Firpo	Dirk Petersen (Chair) Ron Hood Tony Bozzuti Jeff Delrow Michael Gutteridge Sean Kliger Robert McDermott Erik Swanson
VIDD	David Fredricks Banks Warden	Wolfe Maykut	Peter Gilbert Paul Edlefsen

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Hutch-wide IT Council





Job Title and #: XX-XXXXX Information Technology Senior Manager– Vaccine & Infectious Disease Division

About Us

Fred Hutchinson Cancer Research Center, home of three Nobel laureates, is an independent, nonprofit research institution dedicated to the development and advancement of biomedical research to eliminate cancer and other potentially fatal diseases. Recognized internationally for its pioneering work in bone-marrow transplantation, the Center's four scientific divisions collaborate to form a unique environment for conducting basic and applied science. The Hutchinson Center, in collaboration with its clinical and research partners, the University of Washington and Children's Hospital and Regional Medical Center, is the only National Cancer Institute-designated comprehensive cancer center in the Pacific Northwest. Join us and make a difference.

Divisions

The Fred Hutchinson Cancer Research Center conducts research through 5 primary Research divisions:

The **Basic Sciences Division**, built upon a model of collegiality and egalitarianism, continues to be one of the nation's top scientific venues. This division is comprised of about 30 independent and highly interactive laboratories pursuing different, yet related, areas of molecular and cellular biology and utilizing a broad range of approaches and experimental systems.

From laboratory bench to bedside, the **Clinical Research Division** works to develop and analyze new treatments for cancers and other diseases.

The goal of the **Public Health Sciences Division** is to identify strategies that would ultimately reduce the incidence of and mortality from cancer and other diseases. The Public Health Sciences Division is made up of six major programs: 1) The Biostatistics & Biomathematics Program 2) The Cancer Biology Program; 3) The Cancer Prevention Program; 4) The Herbold Computational Biology Program; 5) The Epidemiology Program; and 6) The Molecular Diagnostics Program.

The mission of the **Human Biology Division** is to cultivate interdisciplinary research to advance understanding of human biology and the complex problems of neoplasia and other human diseases. The



division is structured to foster laboratory-based and computational research at the interface of basic, clinical, and population sciences. The Human Biology Division brings together faculty with expertise in molecular and cell biology, genomics, genetics, virology, infectious disease, computational biology, pathology and clinical research.

The **Vaccine and Infectious Disease Division** was established by the Fred Hutchinson Cancer Research Center, first as an Institute in 2007 and as a Scientific Division of the Center in 2010, to address the growing need for treatment and prevention strategies for infectious diseases worldwide. By integrating biometric, laboratory, and clinical science, the researchers at VIDD aim to develop novel vaccines for infectious diseases that threaten global health, to shed light on the workings of the human immune system, and to develop novel treatment and prevention strategies to lessen the burden of infectious diseases and cancers caused by infection, particularly in the immunocompromised host.

VIDD is composed of three research groups: Population Sciences, including the Statistical Center for HIV and AIDS Research and Prevention (SCHARP), Infectious Disease Sciences, including HIV Vaccine Trials Network (HTVN) and Immunology and Vaccine Development.

KEY RELATIONSHIPS This position reports to Andrew McPherson, Chief Operating Officer, Vaccine & Infectious Disease Division with a dotted line to Tony Bozzuti, CIO and VP Center IT. Peers to this role include the Division IT Senior Leaders.

POSITION SUMMARY The **Information Technology Senior Manager** will lead the development of technology strategies for the Vaccine and Infectious Disease Division (VIDD). He/she will work closely with the Director of VIDD, the VIDD Program Directors, Fred Hutchinson CIO and the Center IT & Division IT Leadership to provide vision, leadership and strategic direction in formulating and supporting appropriate technical systems and strategies that support the VIDD research programs, grants and initiatives. The role of the Division IT Senior Manager is to maximize the technology capabilities internal to Fred Hutchinson and externally in the market to meet the needs of VIDD. This senior leader will manage a team of approximately **<enter number>** staff members and be responsible for a budget of **\$xxx million**.

SPECIFIC RESPONSIBILITIES:



- Provide Functional leadership and strategic direction to the VIDD IT department. Lead the development and execution of long-term technology & system strategies for the division, which will involve building business cases for such strategies and influencing the Division to move in new directions.
- Develop strong partnerships with VIDD Population Sciences, including the Statistical Center for HIV and AIDS Research and Prevention (SCHARP), Infectious Disease Sciences, including HIV Vaccine Trials Network (HTVN) and Immunology and Vaccine Development leadership to understand the Division needs and deliver technical solutions to support initiatives.
- Develop strong partnerships with Center IT and other Division IT leadership to drive technology solutions, technical roadmaps, division and Hutch wide policies that best support current and future research initiatives in VIDD.
- Responsible for applications, systems and data critical for the various research programs, initiatives and grants within VIDD.
- Ensure that a portfolio of investments in technology services and projects maximize technical resources provided by Fred Hutch Center IT to support current and future scientific research strategies
- Analyze and assesses the Division's current technology and systems and technology/market trends to determine the potential impact on the Division and to recommend solutions that will address critical deficiencies or scientific research.
- Responsible for a budget of \$XXXX million with influence on an additional \$XX million grant base.
- Manage the operations of the VIDD IT department:
 - Responsible for the support of stable, scalable, and secure systems to support mission critical research processes, grants and operational needs
 - Analyze and report operational, fiscal and strategic department results to Senior management
 - Oversees and manages the evaluation and prioritization of department resource allocation to ensure alignment with Division and department goals and metrics
 - Oversee the evaluation, selection, and integration of technical systems and software products that align with Fred Hutch standards and meet VIDD technical needs.
 - Ensure that development projects align with the enterprise technical architecture/roadmaps and identify when it is necessary to modify the technical architecture to accommodate project needs.



- Reviews all staff proposals for new systems and services; evaluated products and services geared toward the needs/requirements of the Division; aligns with IT standards and architectures
- Continually assess Science / Research industry best practices and participates in relevant industry forums.
- Represent VIDD IT as a member of the IT Governance committees to drive maximum value from IT investments and ensure those investments are aligned with the Center's strategic objectives.
- Partner with VIDD leadership and IT Leaders across the Center to ensure compliance with all applicable enterprise and division specific policies, controls and standards; assess technology risks, driving mitigation plans and actions through process, policy, procedures and technical solutions, to reduce and eliminate vulnerabilities; drive adherence to the terms and conditions of individual grants and contracts, collaboration agreements and initiatives, and data/technology access and use requirements; lead business continuity and disaster recovery planning and testing for all systems/technologies within the Division
- Executes Managerial responsibilities by providing:
 - Individual and team planning, organization, leadership and controls
 - Identify and build skill sets required to support world-class scientific technology.
 - Ensure fair and equitable Performance management and salary administration across the department
 - Develop and communicate management direction, strategy and group goals, ensuring alignment with the Division direction and cross Division IT direction
 - Informs division management of critical issues and support resolution that may affect user service levels or project timeframes
 - Promote, demonstrate and encourage an adherence to Hutch values
 - Contribute to and accept team decisions, resolve conflicts appropriately, validates the contribution of other team members and fosters an atmosphere of trust and collaboration
 - Select and lead a diverse team of technical professionals delivering services at the Seattle Fred Hutchinson Cancer Research Center and remotely in support of programs in other locations. Provide mentoring and coaching
 - Focus on the development and retention of key personnel and increasing employee satisfaction across the department.



- Ensure that employees are engaged and informed to include a strategy and plan for communications encompassing regular updates, all Department Meetings, roundtables, and employee forums
- Partner with external service providers and vendors; Display strong vendor management skills

QUALIFICATIONS: Candidates must have the following qualifications:

- More than five years in a Senior IT Management position
- More than 10 years of experience in a number of IT disciplines in a corporate, research/academic or health service environment, including, but not limited to, technical architecture, network management, application development, systems integration, middleware, database management, and technical services and operations.
- Track record of developing and implementing winning technology strategies within a large, complex organization.
- Exposure to multiple, diverse technical configurations, technologies, and processing environments.
- Large-scale technology project management experience.
- Large-scale information systems operations and customer support experience.
- Quality/Six Sigma expertise or certifications is highly desirable.
- Ability to apply multiple technical solutions to scientific research problems.
- Knowledge of financial models and budgeting.
- Expert knowledge and ability in the following areas:
 - Empowering and motivating others
 - Influencing skills
 - Leading effective meetings at multiple levels within the Fred Hutchinson
 - Strategic Planning and Management
 - Collaboration, partnering and consensus building
 - Organizational operations management
 - IT management
 - Fiscal management



EDUCATION: Bachelor's degree in computer science, information systems, systems analysis, or a related study. Master's degree is preferred.

PERSONAL

CHARACTERISTICS: The successful candidate will possess the following attributes:

- Works well with others
- Ability to thrive in a diverse matrix environment, build consensus, and develop/nurture key relationships and support laterally across business lines.
- Positive influencing skills both verbally and through the preparation of written materials.
- Exceptional interpersonal skills, including teamwork, facilitation, and negotiation.
- Excellent written and verbal communications skills.
- Displays intellectual integrity.
- Ability to convey a clear course and sense of direction and understanding of the external/internal environments.
- Motivated by the long term. Results driven, ensuring short-term goals are achieved that support long-term initiatives with an appropriate sense of urgency.
- Honed analytical skills focused on problem solving and process improvement in a rapidly changing environment.
- Ability to work with a high energy level in an unstructured, fast-paced and often ambiguous work environment, and navigate organizational structures with sensitivity and finesse.
- Strong planning and organizational skills.

Requisition Number: XX-XXXXX

Business Title:

Pay, Benefits & Work Schedule:

Salary DOE + excellent benefits, full-time position

How to Apply:



To apply for this position please click on the "Apply Now" button below. If you have not previously registered with us you will be prompted to do so, otherwise please follow the online directions to complete your application.

The Fred Hutchinson Cancer Research Center and the Seattle Cancer Care Alliance are equal opportunity employers, committed to workforce diversity.



SciTRAP

- Role:** To assist and guide the development of Center-wide policies, practices, multi-year plans, and resource allocations for IT systems and services
- Who:** Selected IT leadership from each division
- Freq:** Weekly
- Example:** Annual budgeting, consolidated storage



**FRED HUTCHINSON
CANCER RESEARCH CENTER**

A LIFE OF SCIENCE

Information Technology

Information Technology
1100 Fairview Avenue North
PO Box 19024, Mailstop J4-300
Seattle, WA 98109-1024
Voice: 206.667.5700
Fax: 206.667.7733

DRAFT 11-30-11

Scientific Technology Resource and Policy Committee (SciTRAP):

November 2011

Purpose:

To assess and guide the development of Center-wide policies, practices, multi-year plans and resource allocations for FHCRC's scientific computing environment.

Goal:

SciTRAP is a major contributor to IT Governance activities at the Center. SciTRAP ensures that the Information Technology Resource and Policy (ITRAP) committee has the information it needs to make informed decisions on essential areas that achieve Center-wide scientific computing objectives.

Frequency of Meetings:

SciTech – Technical Sub-team – weekly or as often as needed to accomplish its duties.
SciTRAP – Full Group – every other month.

Membership (Exhibit A):

SciTRAP is comprised of scientific advisors and technology leaders from FHCRC Divisions. Members are selected on the basis of their knowledge and expertise in understanding the needs of science and IT. Additional personnel may be invited to participate in meetings as needed. Committee members will be adjusted as appropriate.

Responsibility:

(Under the authority of ITRAP)

- Alignment of scientific requirements to technical strategy
- Forecast scientific and technology initiatives to ensure current needs are met and future growth is planned for
- Perform project portfolio reviews for continuing relevance
 - Drive project priorities
 - Define project success measures
 - Provide sponsorship role when appropriate to ensure project plans deliver expected value and desired outcomes
- Manage IT investment decisions for scientific computing
- Advise on the selection of scientific computing technology and architecture
- Monitor scientific computing resources and priority conflicts

**Communication (Exhibit B):**

A critical SciTRAP (both technical and advisors) role is to communicate within science and technology in order to identify emerging needs and operational areas requiring attention. The SciTRAP will communicate with both ITRAP and SubTRAP.

Decision Making Process:

SciTRAP's decision-making process is consensus-based. Issues that cannot be resolved by consensus will be clarified and taken to ITRAP for further discussion and resolution.

Management:

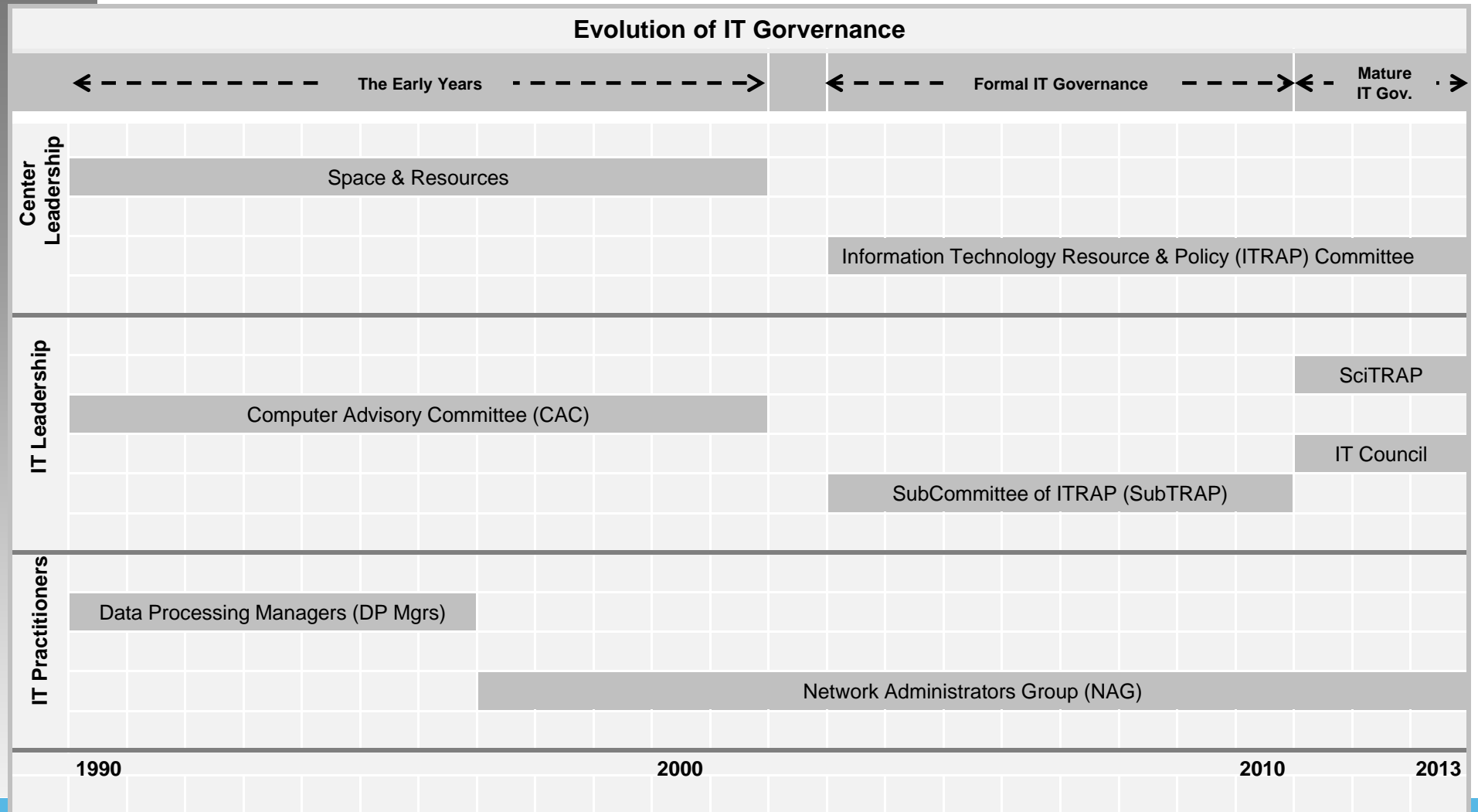
Dirk Petersen, PHS IT Leader, chairs the committee and Ron Hood, Architecture Manager, will act as secondary chair. Staff support is provided IT resources across the center.



Network Administrators Group (NAG)

- Role:** Informal communications forum between centralized IT and distributed IT support staff
- Who:** Interested IT support staff, managed by divisional IT support staff
- Freq:** 2 x monthly
- Example:** Socialize upcoming changes, solicit project suggestions, training

Evolution of IT Governance





Future Governance

- ❑ Clarify role of NAG
- ❑ Other *TRAPs (admin computing, clinical trials)
- ❑ Better alignment w/Center strategic plan
- ❑ Better visibility/control of all IT spending (capital, project-related expense, operating)



Governance Wins for Hutchinson Center

- ❑ Deciding to pursue, writing, and winning the G20 Proposal



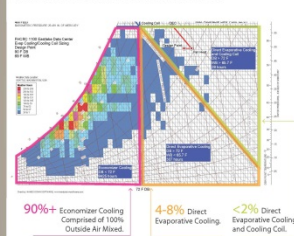
History of Collaboration on Forward-thinking Energy Strategies.

The long-standing partnership between Fred Hutchinson Cancer Research Center and their design and construction partners has always included forward-thinking energy conservation strategies. This collaboration has resulted in a highly flexible and reliable data center with exceptional energy performance.

DESIGN AND CONSTRUCTION PARTNERS:

FRED HUTCHINSON CANCER RESEARCH CENTER
ZIMMER GUNSUL FRASCA ARCHITECTS
AFFILIATED ENGINEERS NW, INC.
TURNER CONSTRUCTION COMPANY
UNIVERSITY MECHANICAL
SASCO ELECTRIC

SEATTLE TEMPERATURE BIN HOURS



Hot Aisle Pods. The entire design of the space is customized to support the cooling system. The server racks, which are arranged in clusters called "hot aisle pods," are designed in a "hot aisle/cold aisle" fashion. Dedicated pod and server fans draw cool air in from the cold aisle to cool the server racks. The quantity of air drawn through the servers is optimized to maximize the temperature rise across the servers. This high temperature rise, along with segregating the cool and hot air exhausted by the servers, reduces the amount of energy to cool the data center.

Fred Hutchinson Cancer Research Center 1100 EASTLAKE DATA CENTER

COOLING INFRASTRUCTURE

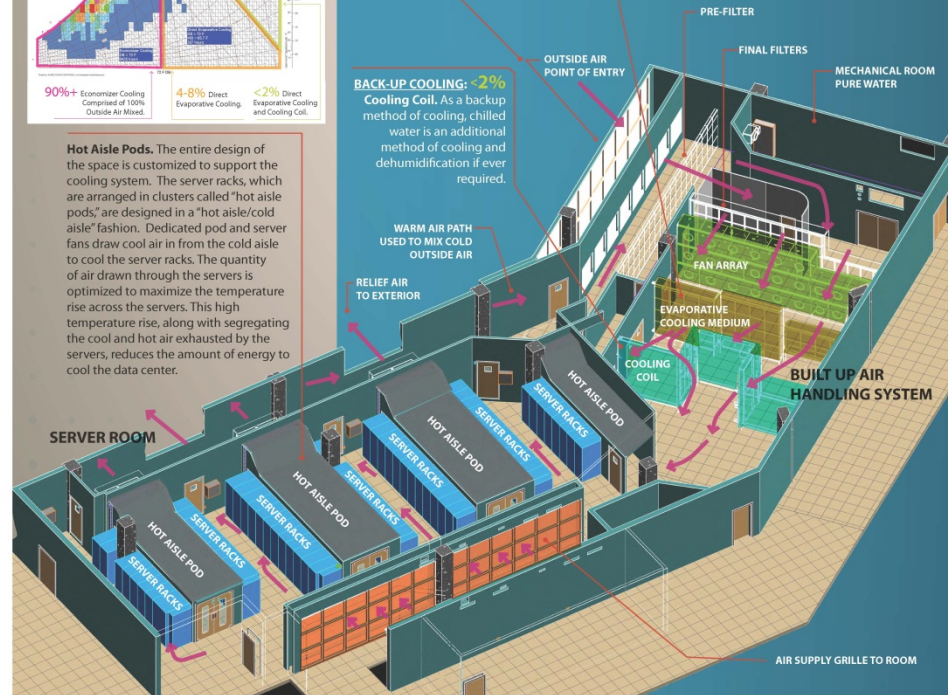
Using a traditional computer room air conditioner approach, HVAC energy can be as much as 50% of a data center's total energy use.* Therefore, mitigating a data center's HVAC energy consumption is a primary design objective for a new data center. The cooling scheme incorporated at 1100 Eastlake is unique in that it leverages as many energy conservation measures as possible without compromising the prescribed design parameters of an ASHRAE Class I equipment environment.

* Source: Best Practices Guide for Energy Efficient Data Center Design, US Department of Energy Federal Energy Management Program, March 2011.

PRIMARY COOLING: 90% or More Cooling via Air Economizer Cycle. The primary approach to cooling the data center is with the use of an air economizer cycle (also known as "free cooling"), which makes use of the cool outside air. For about 90% or more of the hours during a given year, the data center will be cooled with outside air, and no mechanical means of altering air temperature other than fan energy will be employed during this condition.

SECONDARY COOLING: 4-8% Cooling via Direct Evaporative Cooling. For an additional 4-8% percent of the time that falls outside the normal temperature range (above 75°), the secondary cooling approach to cooling the data center will be engaged, which involves the use of direct evaporative cooling (DEC). When temperatures reach above 75°, a cloth-like media is sprayed with cool water. As the supply air passes over the damp material, the heat is removed from the air traveling through the data center. The DEC media does "double duty" given that it is also used as a humidification system when humidity levels fall below the acceptable ASHRAE criteria limits.

BACK-UP COOLING: <2% Cooling Coil. As a backup method of cooling, chilled water is an additional method of cooling and dehumidification if ever required.









Governance Wins for Hutchinson Center

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- ☐ Policy development (Laptop Encryption, PDA Security)



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- ☐ Policy development (Laptop Encryption, PDA Security)
- ☐ Email reliability improvement (early Exchange project)



Exchange Reliability Upgrade Option Summary

(Version 2.4)

In 2006 the Center suffered a number of Exchange outages resulting in a total of approximately 2.25 days of downtime not including scheduled maintenance outages. While the Center does not have an agreed service level expectation for email services, customers voiced frustration with the outages and their real or potential impact on staff productivity and critical functions such as grant preparation. The diverse nature of work at the Center makes it very difficult to objectively evaluate the cost of downtime and the benefit of spending dollars to improve reliability.

Following an outage in October, Center IT's Server Operations Group conducted a thorough review of past problems and identified a number of operational improvements. These improvements have been implemented and are expected to significantly enhance system reliability though only time can validate this assumption. In the November 28th ITRAP meeting, members requested that Center IT investigate additional measures to further improve Exchange reliability over the next 18-24 months by which time a long-term messaging strategy will be in place and more substantial changes can be made to the environment.

This report provides details of 2006 reliability, a review of improvements implemented, and two new options for making the Exchange service more robust. Note that reliability of other messaging components (IMAP mail, Blackberry, list servers, etc.) is not addressed in this report.

Option	Anticipated Reliability	Cost
Take No Further Action/Validate Recent Improvements: Take 6 months to determine whether recent enhancements have sufficiently improved availability to meet the Center's needs.	~ 9 hours <u>unscheduled</u> downtime/year and ~24 hours total (scheduled + unscheduled downtime and dial tone services.) Reliability ~ 99.75%.	No Add'l HW/SW Annual: - Staff - ~\$115,000/yr
Exchange Cluster with Storage Area Network – In House: Center IT to upgrade and manage the new environment.	~ 4 hours downtime/year Reliability ~ 99.95%	Capital - \$160,225 Annual: - Staff - ~\$94,000/yr
Exchange Cluster with Storage Area Network – In House Hardware with Outsourced Management and Monitoring: Similar to Option 2 with third party's proven procedures, expertise, and 7x24 operational capabilities.	~ 1 hour downtime/year (99.99% available) guaranteed via contractual penalties with vendor.	Capital - \$187,136 Annual: - Staff - \$55,000/yr - Service - \$120,768/yr



Governance Wins for Hutchinson Center

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- ☐ Policy development (Laptop Encryption, PDA Security)
- ☐ Email reliability improvement (early Exchange project)
- ☐ New technologies (virtualization, consolidated storage, data center management)



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- ☐ Annual Planning & Portfolio Management

FY13 Annual Planning Timeline

December '11	January '12	February '12	March '12	April '12	May - June '12
Identify Capital & Project Requests	Project Prioritization	Capital Prioritization	Review & Submit Requests	Finance Review & Approval	
<ul style="list-style-type: none"> <input type="checkbox"/> Send out Capital Planning Guidelines and Instructions – Mid December ✓ <input type="checkbox"/> *Update: IT Council (12/5 & 12/19) ✓ 	<ul style="list-style-type: none"> <input type="checkbox"/> *Update: IT Council (1/4) ✓ <input type="checkbox"/> *Update: IT Council (1/18) ✓ <input type="checkbox"/> Capital and Projects Requests Due - 1/23 <input type="checkbox"/> Review and Consolidate Requests for Prioritization Meetings ✓ 	<ul style="list-style-type: none"> <input type="checkbox"/> **Detailed Review : IT Council Prioritizes requests (2/6/ & 2/22) ✓ <input type="checkbox"/> *Update: SciTRAP (2/1) ✓ <input type="checkbox"/> **Detailed Review: SciTech (2/16) ✓ <input type="checkbox"/> *Update: ITRAP (2/9) ✓ 	<ul style="list-style-type: none"> <input type="checkbox"/> **Detailed Review: IT Council - Complete Priority Reviews and Begin Financials Review (capital and operating) (3/5 & 3/19) <input type="checkbox"/> Detailed Review: SciTech (3/15) <input type="checkbox"/> **Detailed Review: Division Specific Reviews to Prioritizes Requests (TBD) <input type="checkbox"/> CIT Resource Capacity Assessment (3/23) <input type="checkbox"/> ITRAP Preparation (3/5, 3/12, 3/22, 3/28, 4.2, 4/9) <input type="checkbox"/> CIT Operating Budgets Due (3/29) 	<ul style="list-style-type: none"> <input type="checkbox"/> **Detailed Review: IT Council Final Review of Capital Request for ITRAP (4/2) <input type="checkbox"/> CIT LT Budget Review #1(4/3) <input type="checkbox"/> CIT LT Budget Review #2(4/9) <input type="checkbox"/> **Detailed Review: SciTRAP Reviews ITRAP Material (4/4) <input type="checkbox"/> Final Presentation: ITRAP: Review Proposal for Capital Request (4/12) <input type="checkbox"/> Submit Final ITRAP Capital Request to Finance (4/17) 	<ul style="list-style-type: none"> <input type="checkbox"/> Capital Request Approved (TBD)

***Update:** A quick status of requests/process will be provided

****Detailed Reviews:** The team collectively will deep dive into project requests to review, prioritize, and assess the financials.



Governance Challenges

- ❑ No core or common business around which to build



Governance Challenges

- ☐ No core or common business around which to build
- ☐ Hard to get scientific participation



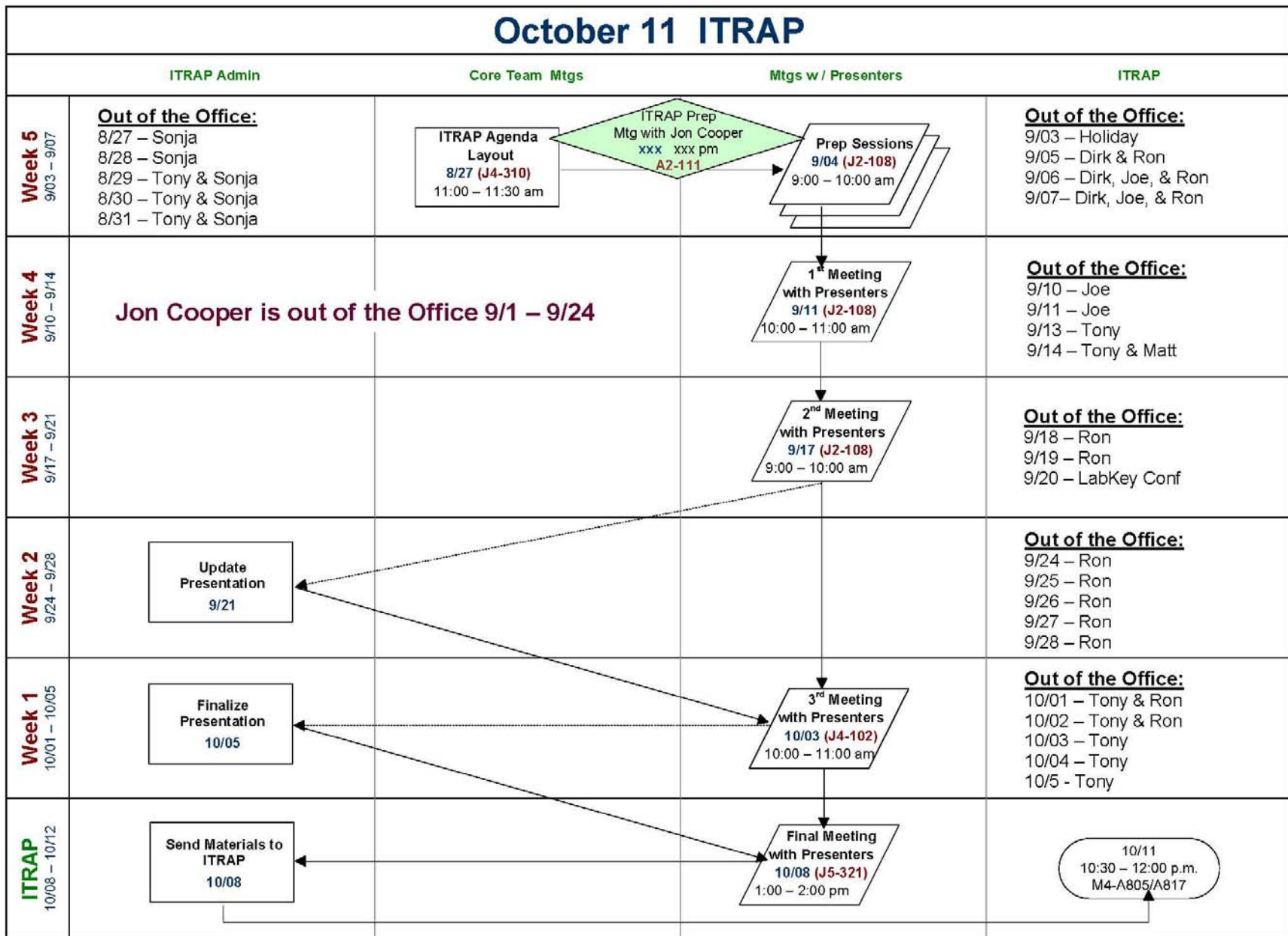
Governance Challenges

- ☐ No core or common business around which to build
- ☐ Hard to get scientific participation
- ☐ Finding right balance between fully baked meetings and open free-for-all discussions



Lessons Learned & Themes

- Governance is real work (significant commitment of staff time & effort)





Lessons Learned & Themes

- ❑ Governance is real work (significant commitment of staff time & effort)
- ❑ Importance of a scientific sponsor (Trask & Cooper)



Lessons Learned & Themes

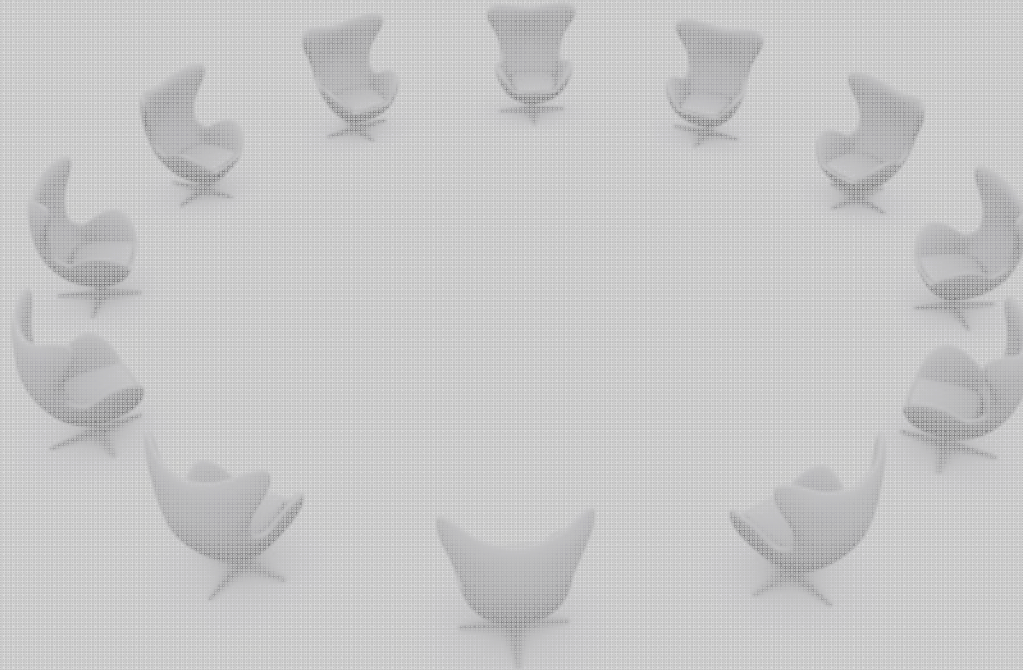
- ☐ Governance is real work (significant commitment of staff time & effort)
- ☐ Importance of a scientific sponsor (Trask & Cooper)
- ☐ COO Support & Control of the Budget

Questions?

Q1.

Q2.

Q3.



FRED HUTCHINSON
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