



**INTERNAL AUDIT**

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UNIVERSITY *of* WASHINGTON

## 2012 Audit Results

Finance, Audit and Facilities Committee  
Board of Regents

May 2013

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# Executive Summary

This report highlights the key goals and results of the audit work completed in 2012.

## Audit Goals

Internal Audit's goals for 2012 were:

- Complete audits within fifteen of the highest risk ranked units of the University;
- Provide the University with value added recommendations to improve controls, mitigate identified risks and increase efficiency within operations;
- Expand our audit universe to include Valley Medical Center and also consider expanding to newly created or acquired UW operations;
- Continue to develop our student intern program; and
- Continue to lead and participate in the Pacific Northwest College and University Internal Audit Conference.

## Audit Results 2012

As a result of the work completed in 2012, we issued 14 audit reports related to the 2011 and 2012 audit plans, provided controls and ethics trainings across campus, conducted follow-up audit procedures to "close" over 150 audit findings, provided liaison services to campus and UW Medicine, and conducted investigations into ethics and/or fraud allegations. Our audit work also included a review at Valley Medical Center for the first time in 2012. Additionally, we continued to directly support the conduct of the external financial statement audit of the University in order to reduce the overall audit fees paid.

The audit reports issued related to work completed in the following areas:

Effort Reporting	UW Bothell Student Fees
HMC/UWMC EPIC System	UW Bothell/Cascadia Service Agreement
HMC/UWMC Patient A/R Write-offs	College of Arts & Sciences - Physics
HMC/UWMC Procard, Travel, Budgets	Intercollegiate Athletics Compliance
HMC/UWMC/UWP Anesthesiology	HMC Whiteboard System Security
Human Subjects Division	Northwest Hospital - IT
SOM - Metabolism	Valley Medical EPIC System - Clinics

Overall, we found the departments tested generally had good control systems in place related to financial management, operations and federal compliance. The exceptions identified resulted primarily from the lack of sufficient management oversight and monitoring rather than problems systemic at the University or UW Health System level. We did identify one critical issue related to the capture and recording of bed charges to the HMC/UWMC EPIC billing system. This deficiency has been resolved.

Our information system audits focused primarily on the implementation of new systems and the security, integrity, and availability of data stored in decentralized, department-owned systems. We found departments need to strengthen controls related to user access, change management, and disaster recovery.

## **2012 Audit Results**

In 2012, Internal Audit continued to emphasize the importance of strong systems of internal control. Overall, we found that internal controls are sufficient to ensure compliance with applicable regulations and policies, and to ensure that business objectives are achieved. We found one critical issue in the course of these scheduled audits related to the capture and recording of bed charges to the HMC/UWMC EPIC billing system. This issue has been resolved by management.

Audit exceptions resulted primarily from lapses in management oversight, poor understanding of specific reconciliation controls and increased pressure on departments which have recently downsized. We have not seen evidence of systemic problems at the University level; however, continued pressure on downsizing of administrative units and departments will increase the risk of significant control breakdowns.

Our information system audits focused primarily on the implementation of the new billing system within the UW Health System, and the security, integrity and availability of data stored in decentralized, department-owned systems. We found departments need to strengthen controls over user access, change control and disaster recovery.

Internal Audit also met with management at Valley Medical Center and performed a post-implementation review of the new EPIC system within the Valley Medical Center clinics.

### **Summary of Key Areas Audited 2012**

We completed a number of audits across both the Campus and UW Health System during 2012. We have summarized the key risks and controls reviewed in these audits below, as well as a brief summary of recommendations to strengthen our controls from these audits.

#### **Federal Grant Effort Reporting**

We reviewed internal controls over the reporting and certification of effort and faculty cost sharing for Federal grants and contracts. We recommended that controls be strengthened over the certification of non-faculty effort and the re-certification of faculty effort.

#### **HMC/UWMC Epic Systems**

We performed a review of controls over the system interfaces to the EPIC billing system, posting of bed charges, UWMC cash drawer security and reconciliation, user access, security administration and production changes. We found one critical issue related to the capture and recording of bed charges to the EPIC billing system due to delayed or unsigned physician orders. Recommended improvements in the process have been implemented. We also recommended improvements in controls related to user access administration and maintenance and authorization of changes to the production environment.

## **Summary of Key Areas Audited 2012 (cont.)**

### **HMC/UWMC Patient Accounts Receivables Write-Off**

We reviewed controls over the write-off of accounts receivables, business continuity planning, and compliance with HIPAA and state requirements relating to charity care applications. We recommended streamlining the charity care application process, implementation of the EPIC system payer contracts module, development of policies and procedures over the research, analysis, and documentation of write-offs, monitoring staff access to HIPAA regulated data, training on the use of accounts receivable codes, and updating the business continuity plan.

### **HMC/UWMC Procard/Travel Card/Budget Review and Reconciliation**

We reviewed controls over expenditures made using the Procard and Travel Card as well as the budget review and reconciliation process. We identified control improvement opportunities related to authorization of transactions, documentation to demonstrate HMC business purpose for the expense, and review of charges.

### **HMC/UWMC/UWP Anesthesiology**

We performed a review of the controls over service capture, submission of charges to the UW Medicine billing system, resolution of rejected charges, and IT data security, integrity, and availability. We recommended improvements to controls related to the billing of services provided by Certified Registered Nurse Anesthetists. The recommendation resulted in the identification of previously unbilled charges of approximately \$700,000 for HMC and UWMC.

### **Human Subjects Division**

We reviewed internal controls related to oversight, training, and monitoring of compliance with federal, state, and University regulations related to the use of human subjects for research. We recommended that controls be strengthened over the documentation and updating of policies and procedures to ensure compliance with federal regulations; training of institutional review board members, researchers, and human subjects division staff; release of personally identifiable information; and monitoring of compliance with federal regulations.

### **School of Medicine - Metabolism**

We reviewed controls over the post award fiscal management of grants and contracts. We recommended improvements related to documentation of key personnel effort and program income rates, approval for purchasing and expense transfer transactions, and monitoring of subcontracts.

### **UW Bothell Student Fees**

We performed a review of the controls over the establishment, allocation, and expenditure of student activity and student technology fees. We identified control improvement opportunities related to defining roles and responsibilities, documenting that expenditures meet student intent, approval of expenditures, and timely reconciliation of budgets.

## **Summary of Key Areas Audited 2012 (cont.)**

### **UW Bothell/Cascadia Service Agreement**

We reviewed controls related to the updating of the shared services agreement between UW Bothell and Cascadia Community College and the billing and collection of fees. We did not identify any control weaknesses that required corrective action.

### **College of Arts & Sciences - Physics**

We reviewed controls over the post award fiscal management of grants and contracts. We recommended improvements related to monitoring of effort certification reporting and timely completion of equipment fabrication journal vouchers.

### **Intercollegiate Athletics**

We reviewed internal controls over governance and organization, continuing eligibility, financial aid, playing and practice seasons, and rules compliance related to forms and coaching limits/contracts. We did not identify any control weaknesses that required corrective action.

### **HMC Electronic Whiteboard System Security**

We reviewed the security over the electronic whiteboard system to ensure compliance with UW Medicine security policies. We recommended strengthening controls over system administrator access. UW Medicine Compliance reviewed the controls over privacy.

### **Northwest Hospital IT General Controls**

We performed an IT general controls review related to the McKesson STAR patient billing system and the HEFM financial management system. We recommended management improve controls over user, system administrator and system developer access, data center access, and encryption of back-up media.

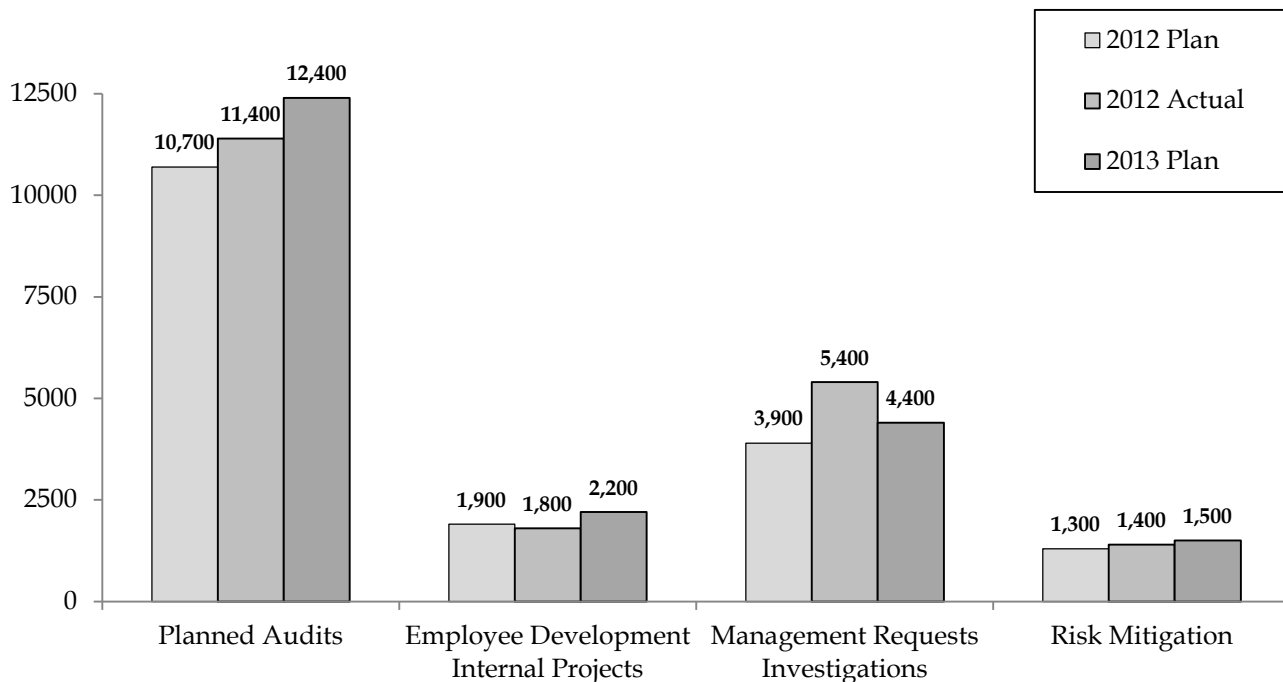
### **Valley Medical EPIC Clinic Post Implementation**

We reviewed controls over the recording of cash receipts in EPIC and that select patient appointments and encounters progressed through the clinic revenue cycle process as expected. We recommended VMC review how certain clinic services should be recorded in EPIC to ensure services provided are captured and billed.

## **Summary of 2013 Planned Audit Changes**

Our 2013 audit plan was approved by the Board of Regents at the November 2012 meeting. Due to requests from management and/or changes in the risk profile of the originally planned areas for audit, we have made several changes to the plan, which are listed in Appendix A.

## Plan to Actual Audit Hours



During calendar 2012, Internal Audit was able to complete more audits and investigations than originally planned for in our budget. As detailed above, we exceeded planned audits, investigations and management request hours by 2,200 hours (approximately 1.5FTE). We accomplished this by refocusing our efforts in these areas, experiencing lower than expected turnover, reorganizing our compliment of internal auditors, expanding our intern program and recognizing overtime hours not contemplated in the 2012 plan. The greatest amount of increased time occurred within the investigation work conducted in 2012. These investigations included a number of complicated situations, which required additional time to validate the allegations. Additionally, we maintained our plan to provide professional development opportunities for IA staff and provide the campus with risk mitigation services during 2012, as detailed on the following pages.

The Planned Audits estimated hours for 2013 represents an increase over both planned and actual hours incurred in 2012. We will continue our focus on these core activities, fill open positions within the department, expect to expand our team via increased support from UW Medicine (one FTE beginning in July 2013) and continued expansion of our Intern Program. Our increase in FTE from UW Medicine will allow expansion of our current work across the entire UW Medicine System, with increasing focus on the systems which support meaningful use of electronic medical records. The planned volume of work included for investigations and management requests is at a level we consider to be reasonable based on historical averages. Additionally, we will continue to deliver trainings on internal controls, research compliance, and WA State Ethics Laws in an effort to increase awareness.

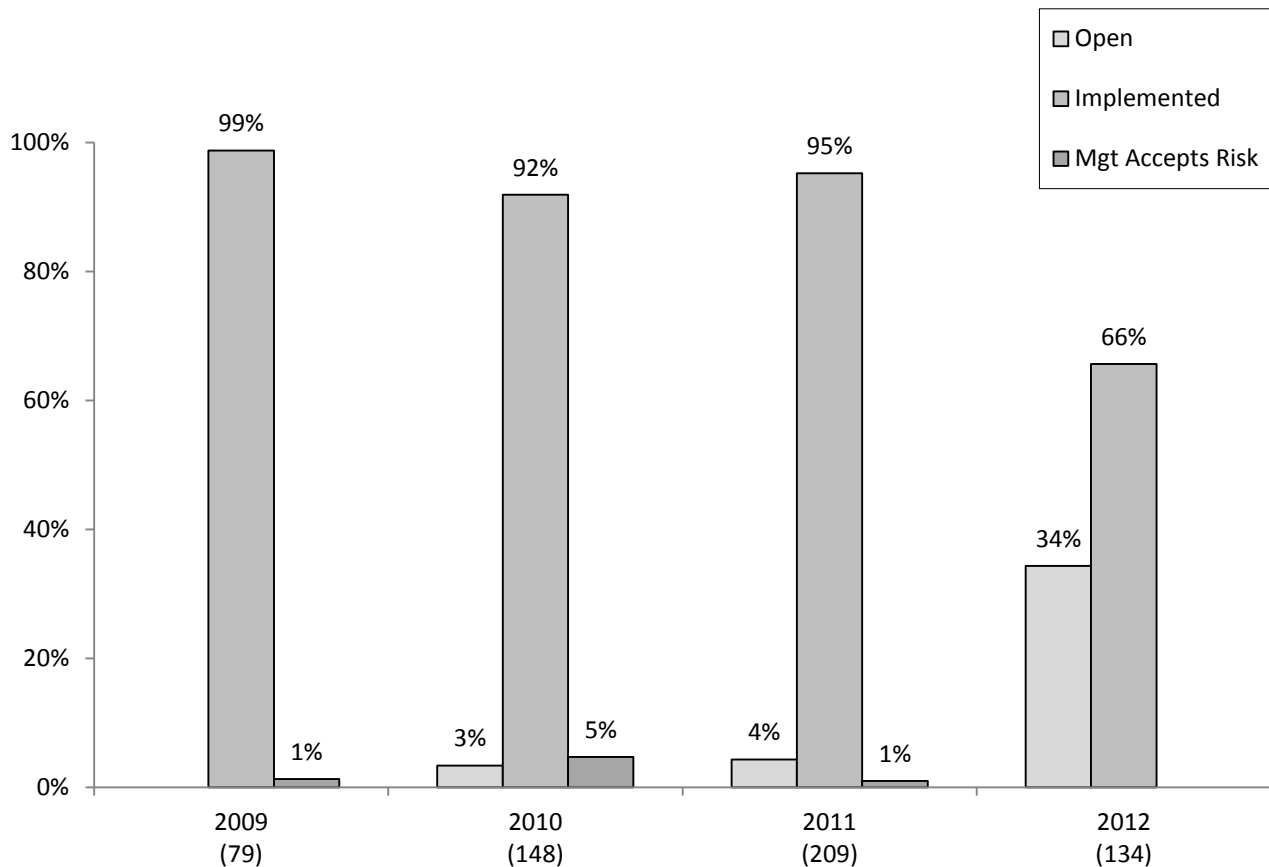
## Additional Contributions by Internal Audit

Internal Audit is also involved in a number of other activities to deliver value to the University. These activities include the follow-up of previously issued audit recommendations, the conduct of internal investigations into fraud and ethics violations, pre-implementation reviews of new IT systems, review of specific risk areas as requested by management, audit liaison services to the campus, advisory work on key campus committees and internal quality improvement initiatives within Internal Audit. We have summarized our involvement in these areas below.

### Follow-up Audit Procedures

Semi-annually Internal Audit conducts follow-up audit procedures to ensure that management is implementing controls as described within their responses to Internal Audit. In 2011 we began ranking findings to provide management with Internal Audit's perspective regarding the ongoing risk of not implementing controls to address the identified audit finding. We have noted that management has responded by promptly addressing those areas identified by Internal Audit as high risk. A semi-annual report is provided to management with the results.

### Percentage of Recommendations Implemented for the Years 2009-2012



(Total Audit Recommendations by Year)



## **Additional Contributions by Internal Audit (cont.)**

### **Management Requests and Advisory Services**

During 2012 Internal Audit conducted a number of projects at the request of the Board of Regents and Executive Management. These focused on testing of controls in areas of management concern and/or consultations on controls for ongoing projects. The projects we participated in included: an audit for the Center for AIDS Research European Union grant, direct assistance to KPMG with our external financial audit, a review of controls over architectural contracts in the Office of Planning and Budget, and general departmental consulting on internal control questions.

### **Liaison Services**

Internal Audit serves as liaison between central administrative offices, University departments and external auditors (federal, state and financial). The department maintains a record of all external auditors on campus, ensures documentation and information requests are understood and met, assists University staff is responding to audit findings and facilitates communication and coordination between different groups of auditors to minimize disruption to departmental activities. Additionally, we attend entrance and exit conferences and act as focal point for putting auditors in touch with the right people at the University to answer their questions. Appendix B contains a listing of external audit organizations who conducted work at the University in 2012.

### **Special Investigations**

Internal Audit received 50 complaints in 2012 that required our attention. Of these, we carried out or are in the process of carrying out 46 investigations related to whistleblower claims and regulatory, ethics and fraud allegations. We carry out many of these investigations as the proxy for the State Auditor's Office (whistleblower and fraud allegations), which allows Internal Audit to quickly identify control weaknesses and provide recommendations on ways to strengthen controls.

### **Trainings Provided**

One of our goals is to continue to assist the University and Medical Centers in their endeavor to strengthen internal controls. As such, we lead, provide and deliver trainings to campus and medical center groups in the areas of Internal Controls and Fraud Prevention, Grants Management, State Ethics Laws and Work and Leave Records Maintenance. We believe these trainings which amount to some 275 hours of work per year help strengthen the overall control environment while providing our staff with opportunities to meet with future audit clients and strengthen their presentation skills. Additionally, during 2012 we worked with UW Tacoma to develop an on-line Washington State Ethics course, which is now available to all employees on the Internal Audit website.

## **Additional Contributions by Internal Audit (cont.)**

### **Participation in UW Committees**

Internal Audit provides advisory input into a number of key initiatives on Campus and at the Medical Centers through its participation on committees. Our participation on committees is solely as an advisor and does not extend to a management / decision making role on the specific initiatives. We provide thoughtful input on the challenges faced by the University through an Internal Audit “lens” and focus on how any initiative impacts the control structure of the University.

A sample of the committees we participate in are: the President’s Advisory Council on Enterprise Risk Management (PACERM), the Compliance, Operations and Finance Council (COFi Council), the Privacy Assurance and Systems Security Council, the Global Support Committee, the Compliance Officers Group, the Data Management Users Group and the Tax Strategy Team.

### **Quality Improvement Initiatives**

Additionally, we undertook a number of internal initiatives in 2012 to increase our productivity including:

- Continuation of the development of LEAN visual boards to improve our audit process, improve client satisfaction, and improve overall time for an audit;
- Revisions to our electronic work paper system templates; and
- Inclusion of risk based rankings in our semi-annual follow-up reports to management.

### **Enterprise Risk Management**

Internal Audit continues to participate in the University’s process to identify, assess and mitigate enterprise-wide risks through participation in the PACERM and COFi councils.

### **Pacific Northwest Internal Audit Conference for Public Universities**

Internal Audit led and participated in the third annual Pacific Northwest Internal Audit Conference for Public Universities. We worked with Washington State University, Western Washington University, and Oregon University System auditors to present a low cost training alternative and create an opportunity to share best practices amongst the audit departments. Other participants in 2012 included the University of Alaska, Seattle University, Oregon Health Sciences University, Evergreen College, University of British Columbia, Boise State University, and Montana State University.

### **Internal Audit Internship Program**

Internal Audit began a student intern program in 2011 for students majoring in Accounting or related fields. The students work during the summer of their Junior year and part-time during their Senior year in Internal Audit. They assist in the performance of audits, investigations, risk assessments, and management advisory services. This provides the students with real life experience on what it is like to be an auditor. In 2012 we employed three students as interns.

# Appendices

## Audit Results

During the course of calendar year 2012, we completed a number of audits that were in progress at the end of 2011, and completed or began most audits planned for 2012. Below is a summary of the progress we have made to date. Additionally, in accordance with IIA standards, we are presenting a summary of changes to 2013 planned audits, approved in November 2012.

### 2011 Carry-Over Audits

Audit	Status
Federal Grant Effort Reporting	Issued
HMC/UWMC EPIC System	Issued
HMC/UWMC Patient Accounts Receivables Write-Off	Issued
HMC/UWMC Procard/Travel Card/Budget Review & Recon.	Issued
HMC/UWMC/UWP Anesthesiology	Issued
Human Subjects Division	Issued
School of Medicine - Metabolism	Issued
UW Bothell Student Fees	Issued
UW Bothell/Cascadia Service Agreement	Issued
Exception Pay	In Progress
HMC Emergency Services	In Progress
Recharge/Cost Centers	In Progress
HMC/UWMC KRONOS (Payroll System)	Deferred 2013

### 2012 Planned Audits

Audit	Status
College of Arts & Sciences - Physics	Issued
ICA NCAA Compliance 2012	Issued
HMC Electronic Whiteboard System Security	Issued
Northwest Hospital IT General Controls	Issued
Valley Medical EPIC Clinic Post Implementation	Issued
HMC/UWMC Admitting and Registration	Issued 2013
HMC/UWMC McKesson Upgrade	Issued 2013
Recharge Centers	Issued 2013
School of Nursing	Issued 2013
Airlift Northwest	In Progress
Hall Health	In Progress
Housing Food Services IT Systems	In Progress
Northwest Hospital Siemens IT Contract	In Progress
Northwest Hospital Conflict of Interest	In Progress
School of Medicine - Global Health	In Progress
Sponsored Research Contracts	In Progress
Student Fees	In Progress
UW Information Technology Rate Setting	In Progress

**2012 Planned Audits (cont.)**

<b>Audit</b>	<b>Status</b>
Meaningful Use	Deferred 2013
Pharmacy	Deferred 2013
UW Tacoma Facilities Use	Deferred 2013
Sponsor Billing and Collection	Replaced by Valley Medical
UW Information Technology ISB Compliance	Replaced by Northwest Hospital IT General Controls
Northwest Hospital Operating Room	Cancelled

**2013 Planned Audit Changes**

<b>Audit</b>	<b>Status</b>
UW Tacoma Facilities Use	Replaced by UW Tacoma Cash Receipts
UW Tacoma Cash Receipts	Replacement audit - In progress
Valley Medical EPIC IT General Controls	To be replaced in late 2013
Foster School of Business IT General Controls	Additional audit in response to management request - In progress

## External Auditors – 2012

### Financial Statement and Agreed Upon Procedures Audits:

#### **KPMG**

University of Washington	Harborview Medical Center
Internal Lending Program	UW Medical Center
Intercollegiate Athletics	Northwest Hospital
Commuter Services	Valley Medical Center
Portage Bay Insurance	UW Physicians
UW Alumni Association	UW Physicians Network
UW Foundation	Airlift Northwest
I-Tech Field Offices	Seattle Cancer Care Alliance

#### **Peterson Sullivan**

Metro Tract	Student Life
Housing & Food Services	Student Apartments

### Federal and State Regulatory Audits and Reviews:

#### **State Auditor's Office**

- Audit of compliance with state laws and regulations
- Audit of federal programs in accordance with the Single Audit Act
- Whistleblower and citizen complaint investigations

#### **Federal Agencies**

##### **Center for Disease Control**

Fiscal Controls Audit, I-TECH Botswana

##### **Environmental Protection Agency**

Grant Audit at Center for Urban Waters, UW Tacoma

##### **Federal Drug Administration**

Human Subject Compliance

##### **National Science Foundation**

- University Wide Review of Grants procedures
- Grant Audit at Departments of Chemistry and Mathematics
- Business Services Review of Center for Nanotechnology

##### **Occupational Health and Safety Administration**

Grant Audit at Construction Management

##### **Office of Human Research Protection**

Compliance with Human Subject Protocols

##### **Office of Naval Research**

Property control system analysis – Equipment Inventory Office

**External Auditors - 2012 (cont.)**

**State, Local, Foreign and Private Agencies**

**European Union**

Grant Audit - Global Health  
Grant Audit - Jackson School

**Inland Northwest Health Services**

Sub Recipient Monitoring - Health Services

**King County**

Sub Recipient Monitoring - Pediatrics

**Notre Dame University**

Sub Recipient Monitoring - Physics

**Oregon Health Sciences University**

Sub Recipient Monitoring - Applied Physics Laboratory

**Puget Sound Regional Council**

Sub Recipient Monitoring - Built Environments

**University of North Carolina - Chapel Hill**

Sub Recipient Monitoring - Biostatistics

**WA Department Labor and Industries**

Grant Audit - Environmental & Occupational Health