

NIEHS Intranet Assessment Final Report

version

NATIONAL INSTITUTES OF HEALTH (NIH)/NATIONAL INSTITUTE OF
ENVIRONMENTAL HEALTH SCIENCES (NIEHS)
ENTERPRISE-WIDE INFORMATION TECHNOLOGY (IT)
SOLUTION (EWITS)

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Document Control Number:

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March 2, 2009

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1 INTRODUCTION

In 2008, NIEHS redesigned its public-facing web site and separated the public content from the content that was strictly for internal NIEHS use. The internal content, now considered the “NIEHS Intranet” was placed behind the firewall, so that it was only accessible to NIEHS staff through login. Now that the public web site redesign is completed, NIEHS plans to redesign the intranet so that the content is easily understandable and accessible to all Institute staff. SRA was asked to conduct an assessment to determine which internal web resources were being used and which were not, what areas could be improved, and what other needs NIEHS staff had that a new intranet could satisfy. SRA conducted usability tests, numerous group meetings, and contextual inquiries, as well as administered a survey to gather research to inform this assessment.

1.1 Purpose and Scope

To help NIEHS plan for an upcoming redesign of the NIEHS intranet, SRA conducted an assessment of the NIEHS internal web resources. The goal of this assessment was to

- Identify which areas of the current NIEHS Intranet are most useful to NIEHS staff;
- Identify which areas of the current NIEHS Intranet could be useful if they were revised and/or updated;
- Identify which areas of the current NIEHS Intranet no longer need to be maintained and can be removed;
- Identify what new and current technologies could be used on the NIEHS Intranet and rank these new and current technologies according to their direct usefulness to and likelihood of adoption by NIEHS staff;
- Assess the level of current 508 compliance on the current NIEHS Intranet, especially those portions developed prior to widespread 508 policies; and
- Assess the level of compliance with other recent HHS web site directives on the current NIEHS Intranet

1.2 Version

| Version | Organization/Change Agent | Date | Description |
|---------|--|---------|--|
| 0.1.0 | SRA/ John Schneider and Hallie Wilfert | 2/26/09 | Submitted draft to Peer Review |
| | SRA / Marcy Jacobs and Mary Foley | 2/27/09 | Peer review comments received |
| | SRA / Hallie Wilfert | 3/2/09 | Submitted to QA |
| 1.1 | SRA/ Hallie Wilfert | 4/30/09 | Added all deliverables into appendixes |

Figure 1-1: Version

1.3 Document Organization

| Section | Title | Contents |
|---------|--|--|
| 1 | Introduction | Introduction to report and scope of work |
| 2 | Overview and Methodology | Research Methodology and high-level findings and recommendations |
| 3 | Findings & Recommendations | Specific findings and recommendations |
| 4 | Next Steps | Additional research that can be done to inform intranet redesign |
| 5 | Appendix A: NIEHS Intranet Assessment Survey Results | Results from the intranet survey |
| 6 | Appendix B: NIEHS Intranet Assessment Survey Results. Open Ended Responses | Open-ended responses to the intranet survey |
| 7 | Appendix C: Usability Test Results | Findings from the Usability Tests |
| 8 | Appendix D: 2008 Intranet Analytics | Summary of Intranet Traffic |

Figure 1-2: Document Organization

2 OVERVIEW AND METHODOLOGY

2.1 Summary

This section provides a synopsis of our observations and recommendations based on the data from our assessment. It also outlines key goals that should guide the redesign process.

A successful intranet should make employees more productive and satisfied with their work, it should establish connections between employees, their work, and the organization. Simply put, a successful intranet should provide all staff members with a centralized place to find the most up-to-date and reliable information on anything related to the job that they perform.

Creating a successful intranet is not an easy task. It requires a strict content management policy that establishes who updates and owns each piece of content. It requires that staff trust the content on the intranet enough to use it regularly. Most importantly, it requires leadership that makes these things a priority within the organization.

2.2 Methodology

SRA conducted an assessment of the NIEHS intranet to determine which internal web resources were being used and which were not, which areas could be improved, and what other needs NIEHS staff had that an intranet could satisfy. The assessment was conducted over several months and involved three trips to the NIEHS campus to talk with key projects stakeholders and NIEHS staff.

The first set of meetings provided SRA with an overview of the NIEHS intranet including how staff were currently using the intranet to provide and consume information and any perceived challenges that might be important to the SRA team's research. NIEHS offices/groups represented in these meetings included Office of Management (OM), Office of the Director (OD), Division of Extramural Research and Training (DERT), Division of Intramural Research (DIR), National Toxicology Program (NTP), Office of Communication and Public Liaison (OCPL), the Computing Technology Branch (CTB) and the Web Coordinating Committee. Furthermore, a group of administrative and secretarial staff from around the Institute was assembled to provide additional perspective.

Next, SRA staff conducted contextual inquiries with 23 staff member participants to look at how individual staff members were using the intranet. Participants were recruited by NIEHS based on suggestions provided by the Web Coordinating Committee; they represented the wide variety of types of staff at NIEHS including scientists, fellows, administrative office staff, secretarial staff, and lab staff. SRA researchers sat with each participant and talked to them about the tasks they performed on a regular basis and how they used the intranet to accomplish these tasks. In addition, SRA looked at artifacts created by staff members to help them perform their jobs.

While the in-person research was being conducted, an online survey was set up and available for all NIEHS staff to answer. The survey probed the overall usability of the intranet and asked staff about the internal resources that they recognized and used or planned on using in the future. The survey contained many opportunities for open-ended answers so that staff could address any issues that were not specifically touched on in the survey. 204 surveys were completed.

The NIEHS intranet site was also evaluated against the section 508 guidelines for accessibility. This evaluation was conducted through a report run against the site using the IBM Rational Policy Tester. This report identified issues of various severity levels. Additionally, SRA staff reviewed the site for other potential section 508 issues.

To give NIEHS some additional benchmarking information about the usability of the current intranet, SRA conducted a usability test on the intranet. Six staff assisted in the test and were asked on a one-on-one basis to perform tasks that were common to all staff across the Institute. In addition, a usability test script was provided to NIEHS that contained audience-specific tasks for use in any usability testing conducted in the future on areas that were more specific to particular audience-types such as scientists or fellows.

Finally, SRA held eight needs-gathering meeting with staff across the Institute. All staff members were invited to participate. The purpose of these meetings was to share high-level findings from the research up until that point and give staff a final opportunity to share their ideas and suggestions for improvements to the NIEHS Intranet.

2.3 Findings

The time and budget allotted for this research did not allow us to perform a systematic and complete inventory of all intranet pages. However, using the survey results in conjunction with the web statistics, contextual inquires and needs-gathering meetings, the pages in Figures 2-1 and 2-2 rose to the top as most used and most useful pages for NIEHS staff in general. While some of these pages and sections of the intranet are used by only certain segments of the NIEHS staff, for instance core laboratory and MOATS pages are used almost exclusively by bench scientists, these pages are widely used enough to need to be prioritized with the pages and sections that are used by staff overall.

The intranet pages that have staff dedicated to their maintenance are for the most part up-to-date and accurate. Areas of the intranet for which responsibility is not clear, such as the forms pages under administrative resources, are less likely to be up-to-date or well organized. We found that these pages were also more likely to frustrate staff during our research due to the inconsistent labeling and navigation.

Through the usability tests, we learned that most staff can perform day-to-day tasks, such as registering a visitor or creating a facilities request, quickly and without much trouble. However, it was unclear whether this ease was due to the number of times the user had performed that particular task (i.e., the more times a task had been performed, the easier it was to perform) or that the web site was laid out in a way that optimized their experience. Exceptions to this finding were the tasks of locating a form and locating training. In both cases, users were unclear where they needed to look to find the information necessary to complete their tasks. In particular, many staff had created their own forms or saved a local copy on their machines so they would not have to find and re-find often used forms.

Pages that could be deleted from the intranet included areas where the content is no longer being maintained, is no longer needed, or is a duplication of material that originates elsewhere. Examples of content that falls into that category include many of the Human Resources pages since many of those functions have moved to NIH. Additionally, pages that are duplicative of content on NIH site, such as some of the administrative and travel information, should not be maintained on the NIEHS intranet as it causes confusion regarding where the most authoritative source of information is located.

The decision to remove pages from the intranet has to be made on a page-by-page basis. Subject matter experts in each area under scrutiny should review content in detail to determine if it is unnecessary or available elsewhere. In cases where the content exists on the NIH intranet, introductory content must still be provided on the NIEHS intranet to provide context to NIEHS staff.

Once content has been examined, standards must be implemented to establish consistency across the site—in look and feel, labeling, navigation, and writing style.

Across NIEHS, personal connections are very important to how people get their work done. Most staff look to their friends or colleagues for answers to their questions rather than look on the intranet. Each office within the Institute functions fairly independently; there is a trusted, central point of contact / resource that each office uses to find out what they need to know and most, if not all, information flows through these people.

| Rank | Top section / home pages |
|------|-----------------------------------|
| 1 | Junction Homepage* |
| 2 | Library Homepage* |
| 3 | Administrative Resources* |
| 4 | Human Resources / EEO* |
| 5 | Health and Safety Branch Homepage |
| 6 | Scientific Resources |
| 7 | Computing Guide* |
| 8 | About NIEHS, NTP and RTP* |
| 9 | Databases |

Figure 2-1: Top sections of intranet

| Rank | Top pages (excluding sections / homepages) |
|------|--|
| 1 | Cafeteria Menu* |
| 2 | Journals |
| 3 | Core Laboratories |
| 4 | Benefits and Payroll* |
| 5 | Forms* |
| 6 | Master Calendar* |
| 7 | Facilities* |
| 8 | ITAS / My Pay* |
| 9 | MOATS |
| 10 | NIEHS Cares Web* |
| 11 | People Locator* |
| 12 | Supplies |
| 13 | Visitor Registration* |

Figure 2-2: Top pages on intranet

2.4 Recommendations

This section provides a summary of key areas in need of improvement. Section 3, *Findings and Recommendations* provides additional detail.

- All pages on the intranet need content owners who are accountable for the accuracy and usability of the content they are assigned.
- Intranet content should be reorganized and categorized using a combination of schemes: frequency of use, level of importance, audience type, subject, task, time/location, and lists.
- Develop a consistent navigation that incorporates *global, local, contextual and supplementary* systems.
- Develop a system for creating labels that are consistent, concise, and are quickly understood by users.
- Establish a content management policy to keep content up-to-date and reviewed regularly.
- Improve visual design and layout.
- Address search issues through the removal of redundant or out-of-date content and consistent application of page titles and metadata.
- Make applications more user friendly and consistent in their look and feel.
- Use office-level central contacts to disseminate changes and improvements to the intranet.

2.5 Participant profiles

Based on the survey responses, the most employees work in the Division of Intramural Research (DIR). The most represented job types were scientists, administrative staff, and trainees/ fellows (comprising Postdoc, graduate student, fellow, intern, STEP, or special volunteers). Based on the survey and other research, SRA created profiles of each internal audience type, listed out their key goals or tasks on the intranet, and developed a sample user persona for each audience.

SRA identified seven key audience types within the NIEHS staff: Manager, the Lab Technician, the Bench Scientist, the Administrative staff, the Desktop Scientist, the Secretary, and the Trainee. Each audience has distinct characteristics, different goals and key tasks, and different needs from the NIEHS Intranet. For each audience type, SRA created a profile of the audience, the tasks they are using the intranet to accomplish on a regular basis and a sample user persona for each audience type. A user

persona is an archetypal representation of an actual group of users who share similar needs and goals. It is a tool that helps keep the user in mind through the design process.

While each of the audience types has different tasks that they use the Intranet to accomplish, there are shared tasks that every employee must perform. Since all audience types need to accomplish these tasks, these tasks are not listed under the individual profiles but they should be addressed when re-designing the NIEHS intranet.

| Division | Number answered | % of total |
|--|-----------------|------------|
| Office of the Director | 18 | 8.8 |
| Office of Management | 16 | 7.8 |
| Division of Extramural Research & Training | 18 | 8.8 |
| Division of Intramural Research | 106 | 51.7 |
| National Toxicology Program | 22 | 10.7 |
| NIH, Stationed at NIEHS | 11 | 5.4 |
| Other | 14 | 6.8 |

Figure 2-3: Survey Respondents by Division

| Position | Number answered | % of total |
|---|-----------------|------------|
| Administrative staff | 55 | 27 |
| Scientist | 59 | 29 |
| Lab Technician | 21 | 10 |
| Postdoc, graduate student, fellow, intern, STEP, or special volunteer | 48 | 23 |
| Other, please state | 22 | 11 |

Figure 2-4: Survey Respondents by Position

3 FINDINGS AND RECOMMENDATIONS

This section outlines observations and recommendations for the NIEHS intranet, and is divided into two sub-sections: *General* and *Specific*.

3.1 General Findings and Recommendations

This section provides an overview of areas that need improvement. The majority of topics covered deal with the Junction homepage, but also with peripheral issues affecting its use.

3.1.1 Organization

One of the goals of good organization is to make logical separations and clear connections between objects, concepts, words, etc. On the Junction homepage, these separation and connections take the form of “content buckets,” or categories (e.g., “Research Support”). Mostly, the relationships of the information within these categories make sense, other times they do not and need to be reassessed. For example, many users could not understand the difference between, “Research Support” and “Scientific Resources.” To the user, that separation seemed like a distinction without a difference. Of course, there will always be disagreement due to the ambiguity of language and concepts, but there needs to be a systematic approach to organizing the information. When possible, heterogeneous content that is unrelated belongs in separate categories while homogeneous content belongs together.

Another goal of organization is to progressively narrow the users’ focus, thereby sending them down a relevant path. Providing too many choices at any one level can undermine this goal. Currently, the Junction homepage and many of its landing pages suffer from having too many paths which users find overwhelming. While having too few choices can be similarly frustrating, the Junction’s main pages need to establish a balance to provide NIEHS staff with a positive experience.

Additionally, content on the intranet that is the most used or most important should be prioritized. Currently, the links are in alphabetical order, which sometimes makes sense, but not without an accompanying organizational scheme. Since the homepage has so much divergent information, there needs to be a smaller number of broad categories to focus users’ attention.

RECOMMENDATIONS:

Reorganize the information on the Junction into a manageable number of categories (4-5), and create sub-sections that narrow in on more specific information for different audience types. Also, use the homepage to highlight key information that is buried within these categories. Some key questions to ask when reorganizing are:

- What information is used most often? (i.e., Cafeteria Menu, Journals, Benefits & Payroll)
- What audience types comprise the majority of users (i.e. scientists, administrative staff, and trainees/ fellows)?
- What information is most important? (e.g., job-specific information)

Listed below are different ways to organize content. Use a combination of these methods as a guide:

- **By Subject** - Consider what the most important subjects are and put relevant information into these categories. Some of the broad, upper level subjects to consider for the NIEHS are:
 - **work-related resources** (supports work of mission: research/science/health)
 - this is the majority of this content is scientific, which calls for further sub-division.
 - key sections: *scientific resources, research support, library resources.*
 - key audience types using this material include: *scientists, lab techs, and trainees.*
 - **administrative / support** (supports work that is administrative or peripheral from mission)
 - this is largely non-scientific information used in support of the Institute’s mission.
 - key sections: *administrative resources, computing guide, health and safety*
 - key audience types using this material include: administrative staff, secretaries, and managers.
 - **personal / community / organizational** (supports employees in a personal manner)
 - this is information that is relevant to employees personally or their relationship to the Institute.

-key sections: *About NIEHS, NTP and RTP, Administrative Resources, Health and Safety, Human Resources/EEO*
-this is information for all audience types.

- **By Task** - In addition to organizing the Junction by subject matter, employees also need to perform specific tasks. When prioritizing which links get top billing on the homepage, keep in mind which tasks are performed most frequently, which are most important, and which are most common to all audience types. The goal is to satisfy as many users as possible. Once users drill down into the sub-sections, these tasks will change and content can be tailored to the specific audiences' needs. Some common tasks include:
 - timekeeping
 - searching journals and/or databases
 - making a lab request
 - searching for benefits info
 - ordering supplies
 - finding a person's name/phone number
- **By Audience** - There are competing interests on all Intranets, so it is important to know who the users are in order to tailor the information to fit their needs. Develop sub-sections that address the specific needs of these audience types. Note that some of the audience types identified have similar enough needs that they could be satisfied on one dedicated page.
- **By Time/Location** - This focuses on news, events and announcements (i.e. *Master Calendar*). Anything with a time or location element can go here.
- **By List** - During the assessment, we observed the need for lists and directories. Many employees knew what information they needed, but they could not easily find it. Many users would be helped greatly by creating a section dedicated to lists and directories such as:
 - A-Z index
 - Branches
 - Offices
 - Labs
 - Groups
 - Scientists
 - Applications
- **Customized** – Customization allows each user personalize a web site by selecting what content is most important for them. There are many approaches to customization, from using widgets, like the iGoogle or MyYahoo pages do, to allowing users to create a separate page for themselves (i.e. “My Site”). Customization can also be performed on a high level by creating pages that contain information specific to audience groups such as by job type or organizational grouping. This functionality is available using Sharepoint, which NIEHS already uses in some parts of the organization; expanding the use of SharePoint for this purpose should be explored further. Useful elements to consider on these customized pages are:
 - personal info (phone, fax, etc)
 - organizational info (division, office, lab)
 - pages and documents they use and/or want to share
 - pending requests (both *of* and *by* them)
 - things in common with others
 - list of colleagues they typically work with
 - list of groups they belong to
 - list of personalized links / RSS feeds (i.e. “My Links”)

3.1.2 Navigation

Site navigation closely relates to site organization. The organization of the site shows user where things are, and contributes to their mental model of how the site functions. The navigation provides users with the paths to get there. Navigation options

should support the different ways that users think about the same content depending on context. There should be multiple ways to get to the same content, but there should also be consistency in the ways the navigation is presented. Four important types of navigation are *global, local, contextual, and supplemental*.

The global navigation provides a touchstone for users to come back to. It should serve as a top-level framework of how the site is structured and appear on almost all pages. Currently, here are some intranet pages/sections that lack the Junction's global navigation and therefore do not provide the users with a way to "get back home." In general, the global navigation should be consistently applied to most pages.

Regarding the Junction's current global navigation, the items listed are not top-level categories: they are list of applications, external sites and internal sub-sites and do not convey the structure of the Intranet. A rule of thumb is that on a high-level, the majority of the content on the Intranet should fit into one or more of those global navigation categories.

After providing users with a constant, global structure the next step is to give them secondary navigation options. Three important types of secondary navigation are local, contextual and supplemental.

Local navigation commonly appears on the left-hand side of a page and provides navigation for the sub-sections of the Intranet. This narrows the focus so the user can more easily explore and not be overwhelmed with choices. Some of the internal pages of the Junction do a good job with local navigation, but it need to be applied consistently.

Contextual navigation can be thought of as links embedded in the text of a page, content that does not fit well with the structured categories, or information from sub-levels that is important enough to bring to the surface. An example is "Related Links," which provide associative connections to users. This type of navigation would serve the Junction well in helping separate peripheral content from the main categories. The left navigation in the Junction provides links to buried content, however, the selection of these links should be reassessed.

Supplemental navigation includes items such as sitemaps, indexes and tutorials. This is information that falls outside of the basic hierarchy of the site, but provides a "backup system" for users to find information on the site. Supplemental navigation can encourage exploration (e.g., sitemaps) or facilitate known-item finding (e.g., "A-Z index"). The Junction has its sitemap listed with other "destination" pages, meaning pages that have information users are seeking, as opposed to "navigation" pages that help in finding this information. This separation of navigation systems helps enforce a mental model of the sites structure and allows users to predict what type of page to which they are linking.

RECOMMENDATIONS:

Implement a consistent navigation scheme that includes global, local, contextual and supplemental navigation.

- **Global** - Make sure the global navigation is applied consistently across all pages throughout the Junction. Limit the number of categories comprising the global navigation to a small number (4-5). These should be at the top level of the site's hierarchy, and communicate the structure of the website to the user. Examples of ideas for global navigation:
 - **Home** - this is the homepage
 - **Support** - supports work that is administrative or peripheral from mission (i.e. *admin resources, computing guide*)
 - **Employee** - supports employees in a personal manner (i.e. *HR, daycare center*)
 - **Resources** - supports work of mission: research/science/health (i.e. *scientific resources, library resources*)
 - **Directories** - list of directories

- **Local** - Within each of the major category headings (i.e. Home, Support, etc.) there will be sub-sections with their own navigation. This navigation should relate to the category it falls under. For example, if we clicked on *Employee*, some possible sub-sections could include:
 - Career
 - Health & Safety
 - Human Resources
 - Training
 - Travel
 - Security
 - Within these sub-sections there could be further division (3rd and 4th levels if necessary). Generally, users expect navigational and information links in different places. Links on the top and sides of pages typically are navigational links that guide users to content, which is found typically in the center of the page.

- **Contextual** - Where appropriate, link to content from within other content (i.e. text in center of page). The use of a “Related Links” or “See Also” box should be considered to connect user to associated content that is not in the local or global navigation that they might have missed otherwise.
- **Supplemental** - This is information that usually falls outside the hierarchy of the website but is relevant and necessary (e.g., NIH Portal). Things like, sitemaps, indexes, customized content and help are all forms of supplemental navigation. A common place for this content is in a utility bar above the header. Good candidates for this are:
 - Sitemap
 - NIH Portal
 - NIEHS Public Site
 - Help (overall Junction help, not Facilities or IT)
 - My Site (personal, customized pages)
 - Feedback (questions/comments)

3.1.3 Labeling

Labels should be consistent, concise and convey the most important information first. Users scan for the most important information and often do not read the entire label name. During the assessment we observed numerous users pass by the links they needed because the first word in the link name wasn’t what they were looking for (i.e. “Campus Security.”). Users looked for “security” not “campus” and moved on.

Two specific examples arose where labeling on the intranet confused users. The first was when the organization’s name was appended to the label (e.g., “NIEHS CARESWeb” or “NIH Central IT Help Desk”). Not only did users have trouble identifying these links correctly, also they mentioned that they did not care whether the function was located at NIH or NIEHS. All they wanted was to quickly and easily complete their task. Second, labels that used acronyms or general descriptors kept users from finding needed content. For instance, users were confused with the label “CARESWeb” which does not describe what is found underneath. Also, users mentioned that the labels “Research Support” and “Scientific Resources” were not specific enough to what was found in each category; users did not know if one was a subset of the other, or how they were distinguished from one another.

RECOMMENDATIONS:

Develop a system for creating labels. Some of the labels on the Junction need to be reassessed. Two main issues are clarity and relevance.

- **Clarity** - The label names are not descriptive enough. For example, “NIEHS CARES Web” is vague and does not describe what users can expect to find on this page.
- **Relevance** - Try to put the most relevant, useful information first in the label name. Many users said that the domain (i.e. NIH versus NIEHS) was largely irrelevant to them. They do not care who controls a particular application or section, all they care about is completing a task or find information. For example, an alternative to “NIH Central IT Help Desk” could be, “IT Help Desk.”

Additional guidelines for creating clear labels include:

- **Style & Presentation** - Use consistent font sizes, colors and styles. Also, develop style guides to avoid haphazard use of punctuation, symbols, etc. For example, “*NIH Enterprise Ethics (NEES)*” vs. “*DETR—Division of Extramural Research & Training.*” Should a colon, a dash, or parenthesis always be used?
 - **Granularity** - Try to keep labels at each level of the hierarchy consistent. For example, a category labeled “DETR Reports” should exist as a subset of a higher “Reports” category, not on the same level.
- **Comprehensiveness** - Anticipate what users are looking for in each section (e.g., “Need a phone number?”)
- **Audience** – Keep the audience in mind and make sure labels are clear, concise and intuitive. Avoid jargon, unless it is understandable by the audience for who the page is designed (e.g., a “For scientists” page).

3.1.4 Layout and Visual Design

There was a consensus among NIEHS staff that the layout and visual design of the NIEHS intranet could be improved. Common issues included center-justified links that made scanning difficult, general aesthetic appeal, lack of consistent layout, and small site width that made the site appear cramped.

RECOMMENDATIONS:

- **Left-justify links** - The links in the left navigation on the Junction homepage are all centered, which makes it hard to see where one link ends and another begins. Left justification should be used in all side navigation areas.
- **Update visual design** - Users did not like the color scheme or layout of many of the pages. A consistent look and feel should be applied to all the pages.
- **Develop templates** – Templates should be created that can be applied to all sub-sections of the Junction. This will ensure a consistent look and feel.
- **Width of homepage** - We realize that this shortcoming is the result of a policy that NIEHS must comply with, and may be overly cautious for the sake of accessibility. However, we did not encounter a single user who used a screen resolution small enough for this to matter. One solution is to use an expandable design. This can be done with a two or three column approach that allows the website to expand or contract depending on the screen size. This would allow the majority of users with larger screens to utilize the extra space, and at the same time would accommodate users with small screens.

3.1.5 Content and Content Management

One issue that staff raised consistently was the apparent inconsistency of the information on the intranet. Staff found that the information is written in different styles, presented in different formats, and maintained in different ways, and because of this they had no confidence that the information that they were viewing was reliable or up-to-date.

RECOMMENDATIONS:

There should be a policy created that dictates the content management practices of the information on the NIEHS intranet. This policy should include as possible language/ style recommendations, naming conventions, and site design patterns. Users were not confident that the information was relevant or up-to-date. A content management system can help by automating workflows and other housekeeping matters. However, some issues involve policy or are a result of internal conflicts, which are more difficult to address. Here are some of the issues found:

- **Author** - Who is it? How to contact?
- **Version** - Is this the right one? How many are there?
- **Relevance** - Is this content used anymore? When was it last updated?
- **Domain conflicts** - Who has the final say? NIH? NIEHS?

Other issues to consider when addressing content are:

- **Metadata** - Tagging content with good, descriptive metadata can go a long way in improving search results.
- **Controlled vocabularies, taxonomies, thesauri** - Decide on an authority file, that is, what words will be used to describe content. For example, if something is related to computers, then the preferred term may be “computers.” It will then live under that category. Then you will have to decide on variant, broader, narrower, and related terms apply, such as “computing,” “IT,” etc. A content management system with a thesaurus can help with this, but you can also talk with your librarians.

3.1.6 Search

One of the areas that staff said needed the most improvement was the intranet search. Users felt that search results typically did not return relevant information, and were generally not considered very useful. Interestingly, during the usability testing, when users searched for a fairly specific piece of content, such as “child care facility,” they were able to complete their task almost 100 percent of the time. When they searched for more general information, such as “personnel form” their results were numerous and less successful. Common issues that staff had with the search was that it retrieves content from old websites or irrelevant content and that they are not sure which sections being searched.

RECOMMENDATIONS:

As described above, tagging content with descriptive metadata, including a title and description for each page, can help with the retrieval of relevant results. The search functionality of the Junction should be assessed separately, however; some things to consider are:

- **Search zones** - Identify areas with homogenous content, and allow users to search these sections separately (i.e. “HR” or “Scientific Resources”). This will help users narrow in on what they are looking for. Whatever organization scheme used for the website will help with deciding on search zones.
- **Content components** - Decide on what is to be searched within documents. You may want to give the subject heading and author’s name more weight and less, or none at all, to peripheral items, like footers.
- **Faceted search results** - Displaying search results by the different facets of a document can also be helpful. Some common facets include:
 - content type
 - audience
 - subject
 - author
 - division/office
- **Navigation vs. Destination pages** - Most users are seeking the destination pages, which is where content lives. Exclude the navigation pages from search results, which merely serve to lead users to content.
- **Old content** - Make sure the search engine is not indexing any old, out-of-date pages or sub-sites.

3.1.7 Applications

While there were some frustrations with specific applications (i.e. Master Calendar), the scope of this project did not allow us to examine many applications in depth. Some general areas where improvements can be made are as follows:

- consistent interfaces throughout organization
- user friendly, intuitive
- effectively supports personal, administrative and job related workflows

RECOMMENDATIONS:

Separate assessments should be done on each application to be redesigned. Issues to consider are:

- **Consistency** - Having consistent interfaces for applications reinforces users’ sense of location. When there are drastic differences in the look and feel of an application, users may feel lost and wonder where they are. Also, it helps the learning curve as users move from one application to another. Consider developing a pattern library of common elements that have defined styles, shapes, and actions. Not only will this improve the user experience, it will also facilitate the software development cycle.
- **User-friendliness** - Application should be simple, easy to use and intuitive. Users do not want to spend any amount of time learning an application, so it has to be designed to use without instruction. To ensure applications are being well-designed, be sure to test early on with potential users.
- **Effectively supports personal tasks, as well as administrative and job related workflows** - Applications are tools to help employees do their job. If an application is making a task more difficult, it is time to re-evaluate it. These tools should eliminate the need for employees to pick up the phone or email someone for help. Applications should also provide feedback (email or onscreen message) that informs users that their request has been processed.

3.1.8 Section 508 Compliance

The Section 508 compliance of the NIEHS intranet site was assessed through a report run against the site using the IBM Rational Policy Tester. This report identified several Section 508 compliancy issues. While the Rational Policy Tester categorized errors as “high” and “informational,” all errors report were violations of Section 508 and should be treated with equal attention. Additionally, SRA staff reviewed the site for potential issues.

A few errors, such as including document titles and skipping navigation instructions, may be resolved by implementing common page templates and styles. Most of the remaining errors need to be resolved manually by developers. We believe that NIEHS can ignore the error “provide a link to download accessible plug in.” This error was cited more than 1,800 times, but in most cases, the Web pages referred to PDF documents which did have associated links to the PDF reader.

| Description of Errors | No. of errors |
|--|---------------|
| If color is used to convey information, make sure the information is also represented another way. | 15,859 |
| Make sure the Web page does not cause the screen to flicker rapidly. | 3,561 |
| If a timed process is about to expire, notify the user, and give the user a way to extend the timeout. | 2,216 |
| Make sure users can skip repetitive navigation links. | 2,057 |
| Provide a link to download accessible plug-ins. | 1,879 |
| If a Web page cannot be made accessible, construct an alternate accessible version. | 1,463 |
| Provide alternative content for each script that conveys information or functionality. | 1,069 |
| If style sheets are ignored or unsupported, ensure that Web pages are still readable and usable. | 996 |
| Include a document TITLE. | 383 |
| Identify headers for the table rows and columns in data tables. | 225 |
| Provide an explicit label for each form control. | 83 |
| Provide alternative text for all images. | 81 |
| Provide synchronized captions for the audio and an auditory description of the video for multimedia presentations. | 71 |
| Provide alternative text for all images map hot-spots (areas). | 45 |
| Provide alternative content for each object. | 33 |
| Do not use timed redirect or refresh when the user cannot adjust it. | 22 |
| Provide alternative content for embed elements. | 8 |
| If possible, use a client-side image map instead of a server-side image map. | 8 |

Figure 2-4: Survey Respondents by Position

RECOMMENDATIONS:

- As part of a new visual design and information architecture, design and develop towards section 508 standards for accessibility.
- Implement a common page templates and styles to resolve the following errors:
 - Include a document TITLE.
 - Make sure users can skip repetitive navigation links.
- While performing content inventory for redesign, note and fix areas where
 - Color is used to convey information
 - Alt text needs to be added to images

3.2 Specific findings and recommendations

3.2.1 Shared documents and Collaboration

A potential use of an employee intranet is to share documents and collaborate with colleagues. NIEHS staff share documents and collaborate in three ways—with people in their lab, office, or division, with staff across the Institute, and with partners and

researchers outside NIEHS. Because no Institute-wide solution has been presented or widely disseminated, a number of solutions have been implemented with varying success. The collaboration solutions we found in use include: e-mail, shared servers, shared network drives and folder systems, Sharepoint sites, and the NIEHS Forum.

RECOMMENDATIONS:

- There needs to be a consistent solution for document sharing and collaboration across the Institute to ensure data quality and backup, as well as consistent training and support. Centralizing the management of these files will also increase knowledge management and knowledge sharing across NIEHS.

3.2.2 Training and Orientation

One of the areas that needs to be developed within the NIEHS Intranet is a single, central location for training and orientation information. Across the Institute, there are many offices that offer training, however, there is no place that aggregates all the available trainings and the training requirements. Staff repeatedly commented that if they were not emailed directly about training requirements, that they had no way of knowing what they were required to take or what career development trainings were available to them. While there is a centralized option for staff to maintain their own training record, most staff did not find this option particularly useful.

RECOMMENDATIONS:

- There should be one central area that captures training and orientation information in varying degrees of granularity—from the Institute-wide training requirements to down to the office- / job- / area-specific trainings.
- All trainings should be captured in the Master Calendar.
- There needs to be a reliable, consistent, and preferably automatic way of tracking trainings. The Health and Safety group has developed an application that tracks trainings and training requirements. This system should be assessed further to see if it could be used in a larger capacity.

3.2.3 Office / Branch Level Autonomy

Currently, the NIEHS intranet is completely decentralized, which has resulted in inconsistent content management and a disjointed look and feel. While there needs to be an overall management strategy imposed on internally-focused content to maintain consistency and quality, certain groups still should be able maintain their own portions of the intranet, especially when the content in that area only applies to and is used by them. Examples of these self-segregated groups include DIR, NTP, and DERT.

RECOMMENDATIONS:

- Unique groups or offices within NIEHS should be able to create and maintain their own portions of the overall intranet as long as the information featured in these division-specific areas are unique to them and not duplicative of information available on the Intranet writ large.
- Information from groups that serve all of the NIEHS in administrative functions or otherwise should be managed centrally and made consistent, both in writing style and look and feel, to present a unified face to the employee.
- One exception to this recommendation is any time-sensitive information that CTB disseminates, such as information about outages and other IT problems. While the information that CTB maintains applies to all NIEHS-staff, maintenance of time-sensitive information from CTB could be delegated directly to that office rather than going through content management process. Policy and guidance information, or any other information that is not time-sensitive can be maintained through whatever centralized content management process is implemented to maintain consistency.

3.2.4 NIEHS / NIH Split

The centralization of certain administrative functions at the NIH level results in difficult presenting information in a consistent way on the NIEHS intranet site. Staff repeatedly voiced that it did not matter to them where their information came from (NIH or NIEHS) as long as they were able to accomplish what they came to site to do. While some staff were frequent users of the NIH portal, other staff had little or no reason to visit it.

RECOMMENDATIONS:

- Inevitably, staff will need to be directed to NIH to perform certain tasks. To avoid confusion, the NIEHS intranet needs to be explicit about who does what and provide context for the information that they do not maintain. Deep links directly into referenced information will help guide staff to needed information in a more seamless manner.
- Use of the NIH portal should be promoted for administrative & secretarial staff who use a lot of functionality on it already, but not for scientific staff who do not use it on a regular basis. For the staff who use the NIH portal frequently, it would be useful to create a portlet on the NIH portal into NIEHS “Junction” so that those who use the portal most can have a link back to NIEHS.

3.2.5 Forms

Across the Institute, different types of forms are available that serve a multitude of purposes. These forms vary from simple PDF forms to more complex database-backend web forms. In addition, some forms are maintained at NIH, but still required for certain NIEHS activities or processes. While this is a complicated area of the intranet from a content strategy perspective, it is also an area that confuses and frustrates staff a great deal, so the return on making even small improvement would be great.

Overall it is difficult to find forms on the NIEHS intranet, and we discovered that even when the correct form is located it might exist in an outdated file format that staff can no longer open. Two of the tasks that we asked staff to perform in the usability tests brought them into the forms area of the intranet and once they arrived at that area staff were more likely to abandon their task than wade through the different forms pages. Additionally, some staff members have created their own versions of forms or saved old forms locally on their machines so that they do not need to find and re-find often used forms.

RECOMMENDATIONS:

- All links to forms need to be named in a clear and consistent way indicating which office the form originated in and the explicit purpose of the form.
- Forms that exist in programs that are no longer supported (e.g., filemaker pro) should be updated to a program that is currently supported.
- Where possible, similar forms should behave in similar ways, e.g., all forms that collect order information should populate the same fields and save information in the same manner.

3.2.6 Master Calendar

The master calendar elicited a great variety of response from staff members. While some staff praised the new version of the master calendar saying that it was a vast improvement over the old version, some staff still complained that it was difficult to find meetings and reserve rooms.

RECOMMENDATIONS:

- Create a policy for what types of events are to be posted in the master calendar and publicize this policy so that staff know what to expect. For instance, trainings are not consistently posted in the master calendar, yet staff expected to be able to find them there during usability testing of the intranet.
- According to anecdotal information, the usability of the Master Calendar could be improved. The room reservation process needs to be simplified, according to staff there are as many steps to reserve a room for a one hour meeting as for a day-long conference.
- Explore automation options such as rss-feeds or rss-email notices to enable staff to subscribe to certain types of posted events. This might be a way to reduce dependence on all-hands emails.

3.2.7 Mac versus PC

A number of issues that staff identified as problem areas on the intranet were associated with the different operating systems that are used around the Institute, namely Mac and PC, and the consistency to which they are supported.¹ Some staff members we spoke to were Mac users at home and PC users in the office (or vice versa) and had difficulty getting both machines supported equally. When we examined information on remote access, staff was less likely to trust the information available when their real

¹ Staff who used Linux machines generally used these machines for specific research purposes and did not expect the Linux machines to be supported in the same way as Mac and PC machines.

world experiences were difficult. In addition, we found that often resources were posted that work for staff using one operating system but not another, yet the support availability was not explained or detailed. For example, events are posted with a “save to calendar” option that works only in Outlook and not Entourage.

RECOMMENDATIONS:

- There needs to be equal support for Mac & PC, from both the computer support perspective and from an intranet content perspective. If instructions are posted on how to do something on PC, there should be similar instructions on how to do the same thing on Mac. If no comparable option exists in one operating system, that should be explained as well.

3.2.8 Real World Issues Affecting Intranet

Not all problems we uncovered in the assessment were problems directly with the NIEHS internal web resources. Sometimes real world problems were frustrating enough to staff that it cast a shadow on the accuracy and usefulness of the intranet content. An example of this issue included the slow turnaround times from NIH facilities reflected on the usefulness of the Facilities information on the NIEHS intranet.

3.2.9 All Hands Emails

One of the issues we explored in our research with staff was the abundance of all hands emails, and whether they could be reduced through a redesigned intranet or through a detailed all hands email strategy. While staff acknowledged that they receive many all hands emails, they relied heavily on these emails to find out what was going on around the Institute. Staff said they were fine deleting the emails that did not apply to them and reacted negatively to the idea of reducing the number or type of emails. Currently, there is no repository for all hands emails on the intranet, forcing staff to save relevant emails until they are no longer useful.

RECOMMENDATIONS:

- Explore creating a number of different staff email lists that staff could subscribe or unsubscribe to based on job-type or topic.
- Create a repository of all hands emails on the intranet and include the URL of the repository in each all hands email that goes out to staff. This will remind staff that there is an area where they can find past notices and might eventually lead to the replacement of some emails with intranet-only announcements.
- Create RSS-feeds of all hands announcements that are placed on the intranet and encourage staff to use the feeds as an alternate way of receiving Institute-wide information.

3.2.10 Driving Traffic to the Intranet with Staff Created Content

One way of encouraging use of an intranet is by making it a destination area and featuring social content (such as staff profiles or restaurant reviews) as well as work-related content. While some staff were receptive to the idea of the non-work-related information on the intranet, most viewed the intranet as a place they went to help them accomplish a work-related task. They were more interested in being able to use the intranet to get their tasks accomplished quickly than in “hanging out” there. However, there is social content that already exists within the NIEHS, e.g. the Trading Post, the Grapevine, and some all-hands emails, that should be incorporated into the intranet to encourage regular traffic.

RECOMMENDATIONS:

- Move the Trading Post from Outlook into the Intranet to encourage staff to return to the intranet home page on a regular basis
- Create a repository of all hand emails and link to them prominently on the intranet homepage.

3.2.11 New Technologies

Staff brought up very few new technologies during our research; however, based on the needs of NIEHS staff there are some technologies that should be considered when redesigning the intranet.

RECOMMENDATIONS:

- RSS Feeds should be created for all announcements that are posted to the Intranet site, including all-hands emails, training schedules, Trading Post posts, and upcoming events.

- RSS feeds should be continued to be supported and promoted by the library staff to help staff keep up with the latest research.
- A web interface that allows personalization should be explored in more depth. While many staff asked for this capability in the “new intranet,” it is possible that a changed information architecture and job-specific pages might fill this need.

4 NEXT STEPS

This section outlines suggestions on how to proceed with the redesign.

4.1 Quick wins

An intranet redesign is a lengthy undertaking because of the number of staff and subject areas involved. To keep the momentum up, it is good practice to first tackle small projects that can be completed quickly and successfully. The following are tasks that require low effort, but should result in large impact:

- Left align the links in the left-hand navigation on the Junction homepage.
- Establishing naming conventions and write clear labels. Spell out all acronyms and rename links that are labeled ambiguously.
- Create a central area for all training information.
- Streamline the forms area. Rename ambiguously named links and group all like forms together.

4.2 Additional research

This needs assessment provides a high-level review of the issues facing the Junction. The following outlines additional research that should be performed to assist in the redesign.

4.2.1 **Content Inventory and ROT analysis**

As a precursor to the redesign, all content should be inventoried to establish the scope of the site. While the content is inventoried it can be examined for “ROT” (*Redundant, Outdated, or Trivial*). Any content that cannot (or should not) be updated can be deleted.

4.2.2 **Card sorting exercises**

A card sorting exercise asks users to take content and sort it into relevant groupings. Specifically, when defining and labeling categories, links and headings, it’s very useful to do some card sorting with users to see how they think about the content. Two frequently used types of card sorts are open-ended and closed:

- **Open-ended** - Users write down their own categories headings on cards and place content into those categories. This is used early on in order to find out how users think about content.
- **Closed** - This involves using pre-define categories and allowing users to place content into these buckets. This is used to validate your selection of categories.

4.2.3 **Web statistics analysis**

Web usage statistics should be tracked and analyzed to monitor the content that is being used most frequently.

4.2.4 **Monitoring Feedback**

As the intranet is being redesigned, feedback should be continuously gathered to monitor staff reactions to changes. Feedback can be gathered in formal ways such as through surveys, usability tests, or focus groups, or informally through anecdotal information.

5 APPENDIX A: NIEHS INTRANET ASSESSMENT SURVEY

5.1 Introduction

One piece of this assessment is a survey to gather information from all NIEHS staff. The survey will be deployed on the NIEHS Intranet and made available for several weeks. This document contains the text version of the survey that has been provided to the developers for coding.

5.2 Purpose

In order to assess the state of the NIEHS Intranet, a survey has been constructed to solicit responses from all NIEHS staff. This survey is designed to capture the following information:

- **Demographics:** The NIEHS division the survey respondent works in and his/her role within the division (e.g., staff scientist, admin, etc.). The length of time the respondent has worked at the NIEHS and if the respondent is a contractor or an NIEHS employee.
- **Current intranet usability:** This part of the survey uses a standard methodology to obtain a standard System Usability Scale (SUS) Score—a single number representing a composite measure of the overall usability of the system. This part of the survey can be re-used to benchmark progress after a redesign.
- **Web site preferences and internet tool usage:** The web site characteristics that respondents value and the web tools they use on a regular basis in or out of work.
- **Work-related NIEHS web resources:** The NIEHS web resources that respondents use most frequently during their workday.
- **Other suggestions for the Intranet:** There are numerous open-ended questions where respondents can explain or detail any ideas they might have for improvements to the NIEHS Intranet. Survey

Below is the text version of the survey that has been provided to the developers for coding.

NIEHS Intranet (JUNCTION/EMPLOYEE WEBSITE) Survey

Thank you for taking time to answer our survey. This survey will help us improve the NIEHS internal web sites for the entire Institute.

(* = required question)

1. *Please indicate the division of NIEHS you work for:

- Office of the Director
- Office of Management
- Division of Extramural Research & Training
- Division of Intramural Research
- National Toxicology Program
- NIH, Stationed at NIEHS
- Other, please state
 - OPEN TEXT

2. *What is your position?

- Administrative staff
- Scientist
- Lab Technician
- Postdoc, graduate student, fellow, intern, STEP, or special volunteer
- Other, please state
 - OPEN TEXT

3. *Are you a contractor?

- Yes
- No

4. *Do you supervise other staff?

- Yes
- No

5. *How long have you been working at NIEHS?

- Less than 1 year
- 1-3 years
- 4-6 years
- 7-9 years
- 10 or more years

On a scale of 1 to 5, please indicate your agreement with the following statements (1 = strongly disagree, 5 = strongly agree)

6. *I like to use the NIEHS internal web sites frequently

USER SHOULD BE ABLE TO SELECT 1-5 (1 = strongly disagree, 5 = strongly agree)

7. *I find the NIEHS internal web sites unnecessarily complex

USER SHOULD BE ABLE TO SELECT 1-5 (1 = strongly disagree, 5 = strongly agree)

8. *I think the NIEHS internal web sites are easy to use

USER SHOULD BE ABLE TO SELECT 1-5 (1 = strongly disagree, 5 = strongly agree)

9. *I think that I would need the support of a technical person to be able to use the NIEHS internal web sites

USER SHOULD BE ABLE TO SELECT 1-5 (1 = strongly disagree, 5 = strongly agree)

10. *I find the various functions in the NIEHS internal web sites are well integrated

USER SHOULD BE ABLE TO SELECT 1-5 (1 = strongly disagree, 5 = strongly agree)

11. *I think there is too much inconsistency in the NIEHS internal web sites

USER SHOULD BE ABLE TO SELECT 1-5 (1 = strongly disagree, 5 = strongly agree)

12. *I would imagine that most people would learn to use the NIEHS internal web sites very quickly

USER SHOULD BE ABLE TO SELECT 1-5 (1 = strongly disagree, 5 = strongly agree)

13. *I find the NIEHS internal web sites very cumbersome to use

USER SHOULD BE ABLE TO SELECT 1-5 (1 = strongly disagree, 5 = strongly agree)

14. *I feel very confident using the NIEHS internal web sites

USER SHOULD BE ABLE TO SELECT 1-5 (1 = strongly disagree, 5 = strongly agree)

15. *I needed to learn a lot of things before I could get going with the NIEHS internal web sites

USER SHOULD BE ABLE TO SELECT 1-5 (1 = strongly disagree, 5 = strongly agree)

16. What features are most important to you on web sites you currently use?

Please select all that apply and rank them on a scale of 1 to 5: (1 = not important; 5 = very important)

• **Attractive design**

USER SHOULD BE ABLE TO SELECT 1-5 (1 = not important; 5 = very important)

• **Current/ up-to-date content**

USER SHOULD BE ABLE TO SELECT 1-5 (1 = not important; 5 = very important)

• **Functional navigation**

USER SHOULD BE ABLE TO SELECT 1-5 (1 = not important; 5 = very important)

• **Good search function**

USER SHOULD BE ABLE TO SELECT 1-5 (1 = not important; 5 = very important)

• **Reliability/ availability**

USER SHOULD BE ABLE TO SELECT 1-5 (1 = not important; 5 = very important)

• **Relevant content**

USER SHOULD BE ABLE TO SELECT 1-5 (1 = not important; 5 = very important)

• **Right tools for the task**

USER SHOULD BE ABLE TO SELECT 1-5 (1 = not important; 5 = very important)

• **Other – please specify**

OPEN TEXT

17. In or out of work, do you use the following web tools?

Please select all that apply and rank for use, participation and future interest: daily, weekly, monthly, yearly, not at all – plan to use, not at all – do not plan to use

• **Audio/podcasts**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

• **Blogs (online journals, example: <http://scienceblogs.com/channel/environment/>, <http://twitter.com/scifritter>)**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

• **Chat/Instant Messenger**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

• **E-learning sites (example: MIT Open Courseware - <http://ocw.mit.edu/OcwWeb/web/home/home/index.htm>)**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

• **Online collaboration**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

- **Online communities/(forums, message boards, discussion lists, groups, etc.)**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

- **Online shopping (examples: Amazon.com, Ebay)**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

- **Social networking (examples: LinkedIn, FaceBook, Plaxo)**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

- **Wikis (co-authored online documents, example: http://en.wikipedia.org/wiki/Environmental_health)**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

- **Video**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

- **Virtual Worlds (example: Second Life, World of Warcraft)**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

18. What do you currently use internal web pages or applications for in the course of your work at NIEHS?

Please select all that apply and rank for: daily, weekly, monthly, yearly, not at all – plan to use, not at all – do not plan to use

- **Communications**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

- **Day to day business (expense forms, etc.)**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

- **E-mail**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

- **Finding people/networking**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

- **Learning/knowledge sharing**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

- **Online communities**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

- **Research support**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

- **Storing documents**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

- **Team collaboration**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

- **Other – please explain**

OPEN TEXT

19. Please select from the list below the NIEHS web resources you recognize and specify which ones you use and how often. Please select all that apply and rank for use, participation and future interest: daily, weekly, monthly, yearly, not at all – plan to use, not at all – do not plan to use

- Budgeting Systems**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

- Cafeteria Menu**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

- CARESWeb**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

- CEBS**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

- Computing Guide**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

- Core Laboratory Web Sites**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

- E-Factor**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

- EHP Public Web Site**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

- Facilities Information**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

- Grapevine**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

- HHS Intranet**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

- HR Information**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

- IMPACII**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

- ITAS/Mypay**

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

The Junction

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

The Junction Search Engine

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

Manuscript and Publication Tracking and Clearance (MS Manager)

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

Master Calendar – to schedule meetings

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

Master Calendar – to see what is going on around the Institute

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

Mouse Information Management System (MIMS)

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

MOATS (Glassware and Media)

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

NIEHS Council Book

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

NIEHS Library

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

NIEHS Public Web Site

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

NIH Portal

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

People Locator (NED)

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

Sharepoint

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

Sitescape

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

SPIRES

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

Supply Ordering

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

Travel Information

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

Visitor Registration and Security

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

Web Site Management System (WSMS)

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

WETCIS

USER SHOULD BE ABLE TO SELECT ONE OF THESE CHOICES: DAILY, WEEKLY, MONTHLY, YEARLY, NOT AT ALL – PLAN TO USE, NOT AT ALL – DO NOT PLAN TO USE

20. Can you easily navigate the NIEHS internal web pages and applications?

YES OR NO

<<DISPLAY ONLY IF ANSWER TO 15 IS NO>> **If you cannot easily navigate the internal NIEHS web pages and applications, which sections do you find hard to get around in?**

OPEN TEXT

21. What do you think is missing from the NIEHS internal web pages? On a scale of 1 to 5, please indicate the priority you would place on having such resources available (1 = low, 5 = urgently needed)

OPEN TEXT, then allow user to rate each open answer 1-5

22. What other ideas do you have for improvements to the NIEHS internal web pages and applications?

OPEN TEXT

23. Please list any other web resources you use that are particularly relevant to the work you do at NIEHS.

OPEN TEXT

6 APPENDIX B: NIEHS INTRANET ASSESSMENT SURVEY RESULTS

24. Please indicate the division of NIEHS you work for:

Total answered: 205

| | Number answered | % of total |
|--|-----------------|-------------|
| Office of the Director | 18 | 8.8 |
| Office of Management | 16 | 7.8 |
| Division of Extramural Research & Training | 18 | 8.8 |
| Division of Intramural Research | 106 | 51.7 |
| National Toxicology Program | 22 | 10.7 |
| NIH, Stationed at NIEHS | 11 | 5.4 |
| Other | 14 | 6.8 |

Answers to "Other" in list format:

1. cmb
2. CMB
3. CMB
4. contractor
5. contractor
6. Contractor
7. Contractor
8. LRDT
9. Office of the Scientific Director

- 10. Research Fellow
- 11. SSS
- 12. test
- 13.
- 14.

25. What is your position?

Total answered: 205

| | Number answered | % of total |
|--|-----------------|------------|
| Administrative staff | 55 | 27 |
| Scientist | 59 | 29 |
| Lab Technician | 21 | 10 |
| Postdoc, graduate student, fellow, intern, STEP, or special volunteer | 48 | 23 |
| Other, please state | 22 | 11 |

Answers to "Other" in list format:

- 1. ACUC staff
- 2. Assitant Project Manager
- 3. Biologist
- 4. consultant
- 5. contract specialist
- 6. contractor
- 7. Contractor
- 8. Contractor
- 9. electronics technician
- 10. field research specialist

- 11. HAS
- 12. maintenance
- 13. Mechanic
- 14. On-site contract staff
- 15. program analyst
- 16. Program Analyst
- 17. Program Director
- 18. project officer
- 19. Public Affairs Specialist
- 20. sysadmin
- 21. tech support
- 22. tech writer

26. Are you a contractor? Total answered: 204

| | Number answered | % of total |
|-----------|-----------------|------------|
| Yes | 26 | 13 |
| No | 178 | 87 |

27. Do you supervise other staff? Total answered: 204

| | Number answered | % of total |
|-----------|-----------------|------------|
| Yes | 59 | 29 |
| No | 145 | 71 |

28. How long have you been working at NIEHS? Total answered: 204

| | Number answered | % of total |
|--|-----------------|------------|
|--|-----------------|------------|

| | | |
|-------------------------|-----------|-----------|
| Less than 1 year | 27 | 13 |
| 1-3 years | 49 | 24 |
| 4-6 years | 41 | 20 |
| 7-9 years | 20 | 10 |
| 10 or more years | 67 | 33 |

29. I like to use the NIEHS internal web sites frequently Total answered: 204

| Strongly Disagree | Disagree | Neither Agree Nor Disagree | Agree | Strongly Agree |
|-------------------|----------|----------------------------|-----------------|----------------|
| 5% (11) | 8% (16) | 18% (36) | 43% (88) | 26% (53) |

30. I find the NIEHS internal web sites unnecessarily complex Total answered: 204

| Strongly Disagree | Disagree | Neither Agree Nor Disagree | Agree | Strongly Agree |
|-------------------|----------|----------------------------|-----------------|----------------|
| 3% (7) | 25% (51) | 28% (56) | 31% (63) | 13% (27) |

31. I think the NIEHS internal web sites are easy to use Total answered: 204

| Strongly Disagree | Disagree | Neither Agree Nor Disagree | Agree | Strongly Agree |
|-------------------|----------|----------------------------|-------|----------------|
| | | | | |

| | | | | |
|------------|-----------------|----------|-----------------|--------|
| 9% of (18) | 31% (63) | 25% (52) | 32% (65) | 3% (6) |
|------------|-----------------|----------|-----------------|--------|

32. I think that I would need the support of a technical person to be able to use the NIEHS internal web sites Total answered: 204

| | | | | |
|-------------------|-----------------|----------------------------|---------|----------------|
| Strongly Disagree | Disagree | Neither Agree Nor Disagree | Agree | Strongly Agree |
| 28% (57) | 45% (92) | 20% (40) | 6% (12) | 1% (3) |

33. I find the various functions in the NIEHS internal web sites are well integrated Total answered: 204

| | | | | |
|-------------------|-----------------|-----------------------------------|----------|----------------|
| Strongly Disagree | Disagree | Neither Agree Nor Disagree | Agree | Strongly Agree |
| 9% (19) | 33% (68) | 34% (69) | 21% (43) | 3% (5) |

34. I think there is too much inconsistency in the NIEHS internal web sites Total answered: 204

| | | | | |
|-------------------|------------|-----------------------------------|------------|----------------|
| Strongly Disagree | Disagree | Neither Agree Nor Disagree | Agree | Strongly Agree |
| 3.4% (7) | 15.7% (32) | 41.2% (84) | 31.4% (64) | 8.3% (17) |

35. I would imagine that most people would learn to use the NIEHS internal web sites very quickly Total answered: 204

| | | | | |
|-------------------|----------|----------------------------|-----------------|----------------|
| Strongly Disagree | Disagree | Neither Agree Nor Disagree | Agree | Strongly Agree |
| 6% (12) | 22% (45) | 31% (64) | 36% (73) | 5% (10) |

36. I find the NIEHS internal web sites very cumbersome to use Total answered: 204

| | | | | |
|-------------------|-------------------|----------------------------|-------------------|----------------|
| Strongly Disagree | Disagree | Neither Agree Nor Disagree | Agree | Strongly Agree |
| 3.9% (8) | 29.4% (60) | 22.1% (45) | 33.3% (68) | 11.3% (23) |

37. I feel very confident using the NIEHS internal web sites Total answered: 204

| | | | | |
|-------------------|----------|-----------------------------------|-----------------|----------------|
| Strongly Disagree | Disagree | Neither Agree Nor Disagree | Agree | Strongly Agree |
| 2% (4) | 14% (29) | 37% (76) | 41% (83) | 6% (12) |

38. I needed to learn a lot of things before I could get going with the NIEHS internal web sites Total answered: 204

| | | | | |
|-------------------|------------------|----------------------------|----------|----------------|
| Strongly Disagree | Disagree | Neither Agree Nor Disagree | Agree | Strongly Agree |
| 7% (14) | 49% (100) | 26% (53) | 15% (31) | 3% (6) |

39. What features are most important to you on web sites you currently use? Total skipped: 21

| | Not important at all | Not very important | Somewhat important | Important | Very important | Total answered |
|--------------------------|-----------------------------|---------------------------|---------------------------|------------------|-----------------------|-----------------------|
| Attractive design | 4% (8) | 22% (43) | 43% (86) | 25% (50) | 6% (12) | 199 |

| | | | | | | |
|------------------------------------|---|---------|----------|------------|--------------------|-----|
| Current/ up-to-date content | 0 | 1% (1) | 2% (4) | 19% (39) | 78% (157) | 201 |
| Functional navigation | 0 | 0 | 2% (4) | 24% (49) | 74% (148) | 201 |
| Good search function | 0 | 1% (1) | 2% (5) | 23% (46) | 74% (149) | 201 |
| Reliability/ availability | 0 | 0 | 5% (9) | 27% (55) | 68% (138) | 202 |
| Relevant content | 0 | .5% (1) | 4.5% (9) | 37.6% (76) | 57.4% (116) | 202 |
| Right tools for the task | 0 | 1% (1) | 8% (17) | 35% (70) | 56% (113) | 201 |

40. What features are important to you on web sites you currently use? See Appendix B

41. In or out of work, do you use the following web tools? Total skipped: 99

| | Daily | Weekly | Monthly | Yearly | Not at all – plan to use | Not at all – do not plan to use | Total answered |
|--|------------|-------------|-------------------|------------|--------------------------|---------------------------------|----------------|
| Audio/podcasts | 13.5% (27) | 17% (33) | 19.5% (39) | 16.5% (34) | 14% (28) | 19.5% (39) | 200 |
| Blogs (online journals, example: http://scienceblogs.com/channel/environment/, | 14.8% (29) | 16.33% (32) | 13.27% (26) | 6.12% (12) | 18.37% (36) | 31.11% (61) | 196 |

| | Daily | Weekly | Monthly | Yearly | Not at all – plan to use | Not at all – do not plan to use | Total answered |
|--------------------------------|-------------|--------------------|--------------------|--------------------|--------------------------|---------------------------------|----------------|
| http://twitter.com/scifritter) | | | | | | | |
| Chat/Instant Messenger | 13.85% (27) | 11.79% (23) | 6.15% (12) | 4.62% (9) | 13.85% (27) | 49.74% (97) | 195 |
| E-learning sites ... | 4.64% (9) | 6.7% (13) | 17.53% (34) | 25.26% (49) | 26.29% (51) | 19.58% (38) | 194 |
| Online collaboration | 9% (17) | 16% (31) | 12% (24) | 15% (28) | 24% (47) | 24% (47) | 194 |
| Online communities ... | 13% (26) | 16% (31) | 17% (34) | 15% (29) | 19% (37) | 20% (38) | 195 |
| Online shopping ... | 5% (9) | 25% (49) | 39% (75) | 15% (30) | 5% (10) | 11% (22) | 195 |
| Social networking ... | 8.72% (17) | 19.48% (38) | 8.72% (17) | 5.13% (10) | 20% (39) | 37.95% (74) | 195 |
| Video | 12.04% (23) | 28.8% (55) | 32.98% (63) | 7.85% (15) | 6.81% (13) | 11.52% (22) | 191 |
| Virtual Worlds ... | 4% (8) | 1% (2) | 1% (2) | 1% (2) | 15% (28) | 78% (151) | 193 |
| Wikis ... | 16.75% (33) | 36.55% (72) | 19.29% (38) | 6.6% (13) | 10.15% (20) | 10.66% (21) | 197 |

42. What do you currently use internal web pages or applications for in the course of your work at NIEHS? Total skipped: 125

| | Daily | Weekly | Monthly | Yearly | Not at all – plan to use | Not at all – do not plan to use | Total answered |
|-----------------------|-----------------|----------|----------|---------|--------------------------|---------------------------------|----------------|
| Communications | 53% (99) | 16% (30) | 10% (19) | 2% (4) | 10% (19) | 9% (17) | 188 |
| Day to day | 32% (60) | 27% (50) | 16% (31) | 5% (10) | 6% (11) | 14% (27) | 189 |

| | Daily | Weekly | Monthly | Yearly | Not at all – plan to use | Not at all – do not plan to use | Total answered |
|--------------------------------|--------------------|--------------------|--------------------|------------|--------------------------|---------------------------------|----------------|
| business (expense forms, etc.) | | | | | | | |
| E-mail | 86% (165) | 4% (8) | 4% (8) | 2% (4) | 1% (2) | 3% (6) | 193 |
| Finding people/networking | 46% (89) | 33% (64) | 13% (26) | 2% (3) | 2% (4) | 4% (8) | 194 |
| Learning/knowledge sharing | 37.97% (71) | 34.76% (65) | 11.76% (22) | 3.75% (7) | 5.88% (11) | 5.88% (11) | 187 |
| Online communities | 8.47% (16) | 15.87% (30) | 14.81% (28) | 6.89% (13) | 21.16% (40) | 32.8% (62) | 189 |
| Research support | 31% (60) | 30% (58) | 15% (28) | 5% (9) | 8% (15) | 11% (21) | 191 |
| Storing documents | 39% (75) | 20% (39) | 8% (16) | 1% (2) | 13% (25) | 19% (36) | 193 |
| Team collaboration | 20% (38) | 22% (42) | 14% (26) | 4% (7) | 24% (44) | 16% (30) | 187 |

43. What do you currently use internal web pages or applications for in the course of your work at NIEHS? See Appendix B

44. Please select from the list below the NIEHS web resources you recognize and specify which ones you use and how often. Total skipped: 929

45. same

46. same

| | Daily | Weekly | Monthly | Yearly | Not at all – plan to use | Not at all – do not plan to use | Total answered |
|-------------------|----------|-----------|-----------------|-----------|--------------------------|---------------------------------|----------------|
| Budgeting Systems | 3% (6) | 8% (14) | 15% (27) | 3% (6) | 11% (20) | 60% (110) | 183 |
| Cafeteria Menu | 3% (6) | 31% (58) | 42% (79) | 6% (11) | 5% (10) | 13% (25) | 189 |
| CARES Web | .61% (1) | 2.44% (4) | 3.66% (6) | 3.66% (6) | 23.78% (39) | 65.85% (108) | 164 |

| | Daily | Weekly | Monthly | Yearly | Not at all – plan to use | Not at all – do not plan to use | Total answered |
|---|------------|---------------------|---------------------|------------|--------------------------|---------------------------------|----------------|
| Cafeteria Menu | 8% (16) | 22% (41) | 20% (38) | 11% (20) | 9% (18) | 30% (57) | 190 |
| Computing Guide | 3% (5) | 7% (13) | 26% (45) | 22% (38) | 14% (25) | 28% (49) | 175 |
| Core Laboratory Web Sites | 7.69% (14) | 23.63% (43) | 23.63% (43) | 6.59% (12) | 8.24% (15) | 30.22% (55) | 182 |
| E-factor | 2.66% (5) | 6.38% (12) | 68.62% (129) | 5.85% (11) | 7.98% (15) | 8.51% (16) | 188 |
| EHP Public Web Site | 3% (6) | 12% (22) | 33% (59) | 15% (26) | 15% (26) | 22% (40) | 179 |
| Facilities Information | 3% (6) | 18% (33) | 37% (67) | 22% (39) | 9% (16) | 11% (20) | 181 |
| Grapevine | 1% (2) | 6% (12) | 73% (137) | 6% (11) | 4% (7) | 10% (19) | 188 |
| HHS Intranet | 4% (7) | 18% (32) | 21% (36) | 16% (27) | 17% (30) | 24% (42) | 174 |
| HR Information | 2% (3) | 13% (24) | 34% (62) | 23% (42) | 9% (16) | 19% (34) | 181 |
| IMPACII | 11% (17) | 8% (12) | 5% (8) | 6% (10) | 10% (16) | 60% (95) | 158 |
| ITAS/Mypay | 9.89% (18) | 54.95% (100) | 10.99% (20) | .54% (1) | 3.85% (7) | 19.78% (36) | 182 |
| MOATS ... | 1.7% (3) | 14.77% (26) | 21.59% (38) | 2.28% (4) | 4.55% (8) | 55.11% (97) | 176 |
| Manuscript and Publication | 1% (2) | 10% (17) | 31% (55) | 17% (30) | 17% (29) | 24% (43) | 176 |
| Master Calendar - to schedule meetings | 9% (17) | 30% (55) | 35% (64) | 9% (17) | 8% (15) | 9% (17) | 185 |
| Master Calendar | 17% (31) | 35% (65) | 25% (47) | 4% (7) | 10% (18) | 9% (17) | 185 |

| | Daily | Weekly | Monthly | Yearly | Not at all – plan to use | Not at all – do not plan to use | Total answered |
|--|------------------|--------------------|--------------------|--------------------|--------------------------|---------------------------------|----------------|
| - to see what is going on around the Institute | | | | | | | |
| Mouse Information Management System | 2% (3) | 4% (7) | 12% (20) | 1% (2) | 15% (25) | 66% (109) | 166 |
| NIEHS Council Book | 1% (2) | 2% (3) | 10% (16) | 3% (5) | 19% (32) | 65% (106) | 164 |
| NIEHS Library | 17% (32) | 24% (44) | 31% (56) | 12% (22) | 8% (14) | 8% (15) | 183 |
| NIEHS Public Web Site | 17.65% (33) | 26.74% (50) | 34.76% (65) | 11.23% (21) | 3.74% (7) | 5.88% (11) | 187 |
| NIH Portal | 20% (37) | 29% (54) | 26% (48) | 10% (18) | 8% (14) | 7% (13) | 184 |
| People Locator (NED) | 28% (53) | 38% (73) | 30% (56) | 2% (4) | 1% (2) | 1% (2) | 190 |
| SPIRES | .64% (1) | 3.21% (5) | 7.69% (12) | 4.49% (7) | 18.59% (29) | 65.38% (102) | 156 |
| Sharepoint | 6% (10) | 12% (19) | 9% (15) | 6% (10) | 22% (36) | 45% (74) | 164 |
| Sitescape | 3.11% (5) | 2.48% (4) | 4.97% (8) | 4.97% (8) | 18.63% (30) | 65.84% (106) | 161 |
| Supply Ordering | 4% (8) | 25% (43) | 24% (42) | 7% (12) | 7% (12) | 33% (58) | 175 |
| The Junction | 74% (143) | 21% (41) | 3% (5) | 0 | 1% (1) | 1% (2) | 192 |
| The Junction Search Engine | 30.6% (56) | 32.79% (60) | 19.67% (36) | 7.65% (14) | 6.01% (11) | 3.28% (6) | 183 |
| Travel Information | 4.09% (7) | 11.11% (19) | 19.88% (34) | 23.39% (40) | 18.13% (31) | 23.39% (40) | 171 |
| Visitor Registration and Security | 2.79% (5) | 17.88% (32) | 48.6% (87) | 16.76% (30) | 8.38% (15) | 5.59% (10) | 179 |
| WETCIS | 2% (3) | 1% (2) | 0 | 2% (3) | 14% (22) | 81% (125) | 155 |
| Web Site Management System | 4% (7) | 10% (16) | 10% (16) | 11% (18) | 16% (26) | 49% (78) | 161 |

47. Can you easily navigate the NIEHS internal web pages and applications?

Total answered: 196

Total skipped: 8

| | Number answered | % of total |
|------------|-----------------|------------|
| Yes | 120 | 61 |
| No | 76 | 39 |

48. If you cannot easily navigate the internal NIEHS web pages and applications, which sections do you find hard to get around in? See Appendix B

49. What resources do you think are missing from the NIEHS internal web pages? S See Appendix B

50. What other ideas do you have for improvements to the NIEHS internal web pages and applications? See Appendix B

51. Please list any other web resources you use that are particularly relevant to the work you do at NIEHS. See Appendix B

7 APPENDIX C: NIEHS INTRANET ASSESSMENT SURVEY. OPEN-ENDED RESPONSES

17. What features are important to you on web sites you currently use?

Search

I would also like the search function to work better than it does. For instance, if you search "Human Resources" the first website that should come up is the Human Resources website, it is not even in the first 20 listings.

A better search engine for searching internal NIEHS information about how to get things done.

Search function

Search features on the library page and on the NTP page

an easy to use search feature. It is easier to search with Google than to search internal web sites.

Advanced search capabilities;

good search function

search functions

Better search functions (currently searches lead mostly to irrelevant PDFs, rather than to a useful place)

search. integrated tools like google search, calendar, etc. ease of use.

Ease of searchability

search-ability

A good search engine

easy search

search feature

A good search engine...I find the NIEHS search results are frequently not relevant.

Search function

Good search functionality!

finding what I need to search for easily

Search

It should be obvious how to search for something

Filters. When looking up information, a key word can give hundreds of hits, but the filters continue to give you too many records to go through to find what you are looking for.

The search engine is bad. Sometime, it is difficult to search correct information easily and quickly;

labeling

The main headings are opaque...they need to be more general.

links that have logical/intuitive names;

Names should reflect the function (ie: get rid of the name Caresweb in favor of "computer support")

Content

Up to date content - most information is outdated

up-to-date content

That they actually work when I need to find information and that what I find there is actually the correct/current information.

up-to-date content.

up-to-date

Always available and up-to-date content.

being kept up to date

factual content

clean, concise pages where it's easy to find what you're looking for.

Also, access to current, timely information is critical.

current, timely information

Information should be up to date

up to date

Pages at NIEHS should be more regularly maintained and updated. There should be a dedicated staff that is easily accessible to interact with to update information.

Up-to-date information! Outdated names and contact info, etc., take additional time for me as well as inconveniencing individuals who are no longer associated with the roles incorrectly assigned to them by long-obsolete web site information.

Pages at NIEHS should be more regularly maintained and updated. There should be a dedicated staff that is easily accessible to interact with to update information.

up-to-date content

Current data

keeping information up to date

Up to date info.

Reliable/authoritative info, with date of last update.

Names of contacts for further info or clarification.

Well organized text

Non-cyber contact information

Ease of use

Easy to use.

ease of use

Ease of use

easy to use –

Easy to use.

Ease of use, intuitive, and quickness

ease of use

Findability / navigation

Ability to quickly find the information I need to perform my job

being able to find what you are looking for

Intuitive navigation that would immediately allow me to get to the information I need.

easy to find and navigate with good references

I find it's really difficult to find information.

Ease of navigation (finding what I want easily),

Intuitive navigation

easy to navigate

Ease of finding needed links

ease of finding information

find what I want quickly.

easy to navigate through

easy to use navigation tools

You should not need to write down how you found a document last time to find it again

Ability to locate services quickly

ease of navigation.

It is hard to know where to look to find different kinds of information. And the search rarely provides the information one is looking for.

Organizational schemes that make sense. Which often translates into an intelligent navigation menu.

clear navigation through pages

easily find accurate resources and contact information

Finding correct subpages easily. For example, on some university websites, the listing of personnel can be very hard to find, especially if looking for a person's or lab's web page.

easy navigation

Easy to locate necessary information.

easy navigation.

Intuitive. The designer knows what people are after and creates obvious path.

menu

Clear non-redundant well-designed menu

Delivery on menu items

Easily identifiable menus

organization

Organization (both internal structure and aesthetically);

organization, ability to get to lots of places from most any page,

organized in obvious ways

organization of content on the website

organized in a way that is easy to find or access

access to relevant information

options are clear and easy to determine

Remote access

ability to access remotely (through VPN).

PDA accessible

ability to browse on a PDA

consistent interface

Consistent interface on pages

Clear

Clarity,

clarity

easy, logical scrolling from page to page;

links

links placed in easily found, logical places on the page;

fewer separate places to look for links rather than the (oh so popular) complex sites with multiple nav areas

useful/most frequently used links on home page;

links to often used webpages

obvious links to other information

links to other sites -- many of them are dead/broken and need fixed

Working links

Important links are submerged under general information. I will be happy if top page has link aggregation which contains 'frequently access pages' or 'you need is...

Usability / information architecture

adheres to usability standards (easy to read, navigate)

simple information architecture

fast loading

Load rapidly

fast loading

pages don't take a long time to load and do not have flash etc.

Reliable

reliability

personalization / flexibility

Flexibility. The ability to personalize the landing page to provide me with the information and tools I need.

Shortcuts to some of the websites I use.

Layout - Fonts / readability

big fonts

nice graphics

not too much on each page

sensible layouts

Readability onscreen

large enough font,

Good and lovely design-currently, it is not so good;
Not over-engineered, info is more important than elaborate presentation

Sitemap

A good site map to quickly locate the page containing information I want.

Entering information

ability to easily input information

Converting information

ability to access information quickly and convert to a pdf, excel or word or html as necessary.

Convenient

Convenience. To be able to see pertinent information immediately without having to dig for it in different places.
Easy access

Misc

testing

No specific web-sites is ot that important to me-

Full information

Also a lot of people don't know how to use or how to reach what they need.

Specific to NIEHS Intranet - pages that are important

Ordering

Online ordering.

Media

order supplies, media, histology services and other internal services

Email

Web e-mail

Library

Library resources

Lybrary

library database

library resources

Library access

Library

Administrative Info

administrative resources
Administrative functions

ITAS
ITAS
ITAS

Computer Support

NIEHS CARESweb
NIEHS Cares Web
CaresWEB
Computing Guide, specifically Remote Access

Calendar

Master Calendar events
Calendar
Announcements
Calendar, news publications
Conference room scheduling is buried under events.

Scientific support

Make easy links to the core labs from the cover web page such as histology and immunohistochemistry. I always have trouble finding these sites and usually have to ask someone for help. My colleagues that I ask for help also have trouble finding these sites.

core laboratories interfaces

Core facilities: For eg. If I am looking for DNA sequencing facility, I cannot find that in our core facility section. I have to search for it or have to pull out a book mark.

I do not even find the Confocal microscopy section in the core facility neither the flow facility.

sample submission to core facilities

Core supports

DIR pages

PS some website is poorly designed for using. For example, the histology request form.

Lunch menu

lunch menu :-)
Cafeteria menu

Finding people / People Locator

PEOPLE LOCATOR
People Locator
people locator
People locator

Members of specific labs

People Locators,
people locator
bios of staff
Directory

Visitor registration

Visitor registration

Document tracking

Document Tracking

Forms

Forms
general navigation to find forms

Human Resources

Finding anything related to HR is extraordinarily difficult.
Human Resources

Travel

Travel
There's no main link for travel

Not categorized

benefits, moats, supplies, itas

Direct visible link for postdocs,

I use a lot of the administrative web sites to perform daily functions and I also search scientific and others websites frequently for needed information. I feel the internal site needs a better search tool as it is often difficult to find what you are looking for, even if you know that the site exists. Also, I find that much of the internal information is out of date.

Documents

Junction Site map

NBS

personnel

I always use same function on this website. For example, Request article, request CARESweb, Supplies, Master calendar (and create event), visitor registration and cafeteria menu. Unfortunately, I spent long time how to get to.

moats, self service store, find people, core labs

All links on the left hand side

The ones I use most frequently: ITAS, CARESWeb, NIEHS forms, Visitor registration, People's locator, Publication clearance, master calendar

quick access to the items i use or should be aware of and a site map for all the pages that are linked. the conference room reservation is four clicks and a pass word away from the junction. WAY too many. most of what is on the junction i don't use. I would like to be able to order the things i use as web parts and integrate with other google items on a single page.

Easy access to policy pages: Delegations of Authority, Awards, Payroll, Alternative Work Schedules, Budget, Travel

Easy access to program pages: First Environments, Work/Life Programs, Administrative Services and Analysis Branch Pages

Easy access to publications and information like The Grapevine, the eFactor, map to NIEHS, directions to NIEHS

ITAS, Calendar, Travel Pages, E-Cares, Conference scheduling, phone book, WETP WETCIS- only WETB members and contractors can use this.

Others important sites include: NIH Portal. I like the portal and this it should be used as a model to design a NIEHS portal intranet

Easy access to NIH/NIEHS Systems - like ITAS, Conference Room Scheduling, nVision, NSB Budget System, document tracking, CARESweb, Visitor Registration, Mandatory Tracking, PEOPLE database

Facilities supports

Information on central/core facilities, MOATS, Warehouse/Self-service store etc. Investigator/personnel information, ability to send `urgent lab needs' request etc.

A dedicated page for each scientist/postdoc/student which would describe his/her rese

arch interests, a resume, and scientific accomplishments including publication. This should also be available in the external website as well.

Ordering supplies (MOATS and Self Service Store/Warehouse); Core Facility sample submission forms;

Access to library, core facilities, animal resources

Authority information resource - currently, everybody, lab, department could send e-mails to each person here everyday, so I do not understand why the NIEHS website could be the only information resource for everybody to save time for everybody?

To have timely announcements in one place so that my e-mail in-box does not get clogged with messages not relevant to what I do

Misc

The current junction page has a quite old look, it should have an eye appeal and better structure.

It seems to me that the web site needs to be logical. The web site design should take into consideration to primary user. For example, what is the most frequent need/area that an outside individual has when accessing the DERT web site?

Developers should ask for feed back from users. I received calls asking for assistance to find information on DERT grants, funding, funding announcements, and programs.

The JUNCTION hub page is very helpful.

The database application behind the web pages are current and working well. Many of our web applications are not current and buggy. The web pages and structure are not as important as the applications behind the screens.

clinical research

The lefthand sidebar and the top sidebars are well organized and the most useful for me. However, navigating the main content was very cumbersome and confusing at first. Once I started to get an idea of how it was organized, it got a little easier. However, I still find myself searching for a while to find a particular webpage that I've found before. The major exception is the lefthand menus and the toolbar along the top.

20. What do you currently use internal web pages or applications for in the course of your work at NIEHS?

Finding people / org chart

finding people,

People Locator

people finder,

people locator

finding people's phone numbers, offices, supervisor (people locator)

find research support and contract information for people

people locator

NED,

People locator,

people locator,

people locator

Finding coworker contact information,

biggest thing is people locator.

locating NIEHS staff room number or phone number

People Locator

people search

using People Locator

people finder

Finding Organizational Branches

organizational listing

finding various labs/offices

people locator,

contract information

I use the internal webpages primarily to look up people's email/regular addresses at NIEHS (for work),

People directory

People locator

personnel directory

learn about people at the NIEHS

Lab web pages for reference and recruitment of postdocs.

Getting info about different labs

finding people

Filling out forms

Search for and filling out forms required to do various things (weekly)

government forms,

-get forms-

Find forms

ethics forms

on-line internal forms

Finding out what's new

New information on Junction page

getting info about recent move

Any alerts at the Institute.

Library / Locating articles

Library resources,

NIH Library access to journals
the library
database - pubmed, web of science
library services,
access to journal articles
library resources
PubMed,
Pubmed and Google searches for info (Daily)
Library: Journals
library resources
Library services
Library info
Document archival/retrieving
publications
library pages for literature search
Search reference papers;
Search the conferences and new publications
Searching for articles
publications,
library resources
finding journal articles
library resources
finding up-to-date information regarding research
Obtain the basic knowledge or professional suggestions on new concepts, theory, methods, etc. for my research reports

Ordering supplies

ordering,
animal ordering
purchasing information for consumables
Ordering supplies; checking inventory of publications in the warehouse.
order supplies, media, histology services
purchasing
media ordering
supplies ordering
media ordering,
ordering information
Supply
MOATS
ordering supplies
ordering media/supplies
supplies

moats
lab supply sheets

Scientific support

protocols
Use Core Facilities
To transmit our developed lab protocols
Find other users lab protocols
obtaining scientific support from core laboratories
research, finding protocols
Requesting core services (weekly)
i also (in my previous position in DIR) frequently used the junction to find core facility websites.
core facility sample submission,
keeping track of our mouse protocol information
Keeping track of mouse colonies
finding safety information
to download documents or instructions (ie the animal care facility documents),
supply ordering,
Search chemical/dyes/antibody and the protocol;
Search new techniques/methods in the research;
Collaboration with our core facilities
NTP chemicals info
Data manipulation.
protocols,
Urgent Lab Need
core facilities, mouse information
signing up to use common equipment
access to sequencing core
reagent request,

Computer support

Maintaining the IT Wiki
Sharepoint (Better integration needed, firefox support needed, mac support needed)
Computing Guide
web email
entering computer problems (caresweb)
contact computer support
I use cares web to request computer support. (monthly at least)
Requesting computer support (weekly)
computer tech support,

access to computer help desk
requesting it support.

Manuscript tracking

the manuscript tracking.
document-tracking

I occasionally use the manuscript tracking system when we are publishing something.(every few months)
submitting manuscripts,
publication submission

Reserving rooms / Calendar of events

reserving a conference room,
conference scheduling
schedule conference rooms

Calendar/conf rooms to schedule conference rooms and occasionally check locations or notices of meetings. (Weekly)

Scheduling meetings or book conference rooms (weekly)

conference room scheduling

booking conference space and reviewing calendar,
calendar

view calendar of events

Master Calendar

to look for posted seminars.

Schedule seminars,

Group meetings

Scheduling

signing out conference rooms

Finding what seminars, workshops and other informational forums are going on at the Institute. This includes science and non science activities.

Conference room reservations

organizing meetings

seminar announcements,

ITAS

ITAS

ITAS

ITAS

I use ITAS for time keeping and leave tracking. (weekly)

verify timecard

ITAS system,

Administrative work: ITAS etc.

ITAS,

ITAS

ITAS
ITAS,
Payroll

Visitor registration
visitor registration
Visitor registration

Email
email
e-mail,
e-mail,
I use mostly e-mail and internet through Explorer, not the internal web site.
i never access email through thr junction.
E-mail
email

Grant information
locating grant solicitations
grant information

Travel
travel system,
Travel
Find info about travel regulations
looking for internal NIEHS documents and webpages on travel - ie OMEGA travel forms, etc.

Benefits
Find info about benefits

Collaborating
Online collaboration
communicating with fellow staff members
Team collaboration,

Administrative information
administrative databases like People and inventory and financial
administrative resourses
personnel and day-to-day functions.
storing data, record keeping, email

Administrative functions

finding information. - especial HR and admin things.

Not categorized

Fill out forms. submit requests. Approve requests. Manage projects.

To find how to get things done, find the correct forms, contact the right people, submit work orders, track orders, find people, search out core facility help, use internal ordering mechanisms, animal orders, radioactive orders, core facility interaction, media prep, warehouse ordering, repairs, scheduling conferences and meetings, register visitor, publication clearance, NIH portal, travel certification, internal news, library resources, and more.

Look for fitness room schedule (montly)

We use share point and the shared DERT drive to share documents and work collaboratively (weekly-monthly)

Grapevine

HR

access to current HHS, NIH and NIEHS policy, procedures, guidance and SOPs.

Trying to update my webpage (monthly)

See where I can provide feedback about something (monthly)

research and communications.

IMPAC system,

providing extramural community members with links to relevant health information.

The cafeteria menu is also very useful ;-)

News

I would like to have and maintain an intranet web page to make people inside NIEHS aware of my collaborative research services- especially new investigators to the institute. Unfortunately as I am a contractor and not linked to a specific research laboratory, it is impossible for me to update my webpage with current information and my webpage has been repeatedly removed and not made readily accessible.

NBS.

property management

property management

research government regulations

I use a variety of the internal web pages and applications related to financial management, budget, procurement, property, personnel management, scientific resource management, analysis, etc.

esirius

requests for services,

Access Budget application

EHP access

Communications - agenda setting

communications, emails, postings of documents

intramural research

access to other NIEHS groups (library etc.)

I try to find answers I've forgotten from training modules, but that can be more difficult. Usually I just email the person directly in that circumstance.

clinical research

Misc

Directing my users to appropriate pages.

I post current forms and information for others in DIR to use, not sure what you mean by an internal application

Researching information

I didn't even know what some of the categories are.

web access to e-mail when telecommuting

information gathering

Look up documentation that is stored on line from web page links.

use the web page to find the application I am looking for

testing

For mostly everthing

For the previous quesitons you shoudl have listed the actual applications. Which one refers to ITAS? What the heck ddo you mean by "communications"?

Also, information that requires central access to a host of people across various disciplines.

find info

If they actually worked we have/had an internal web based database

Rarely due to difficulty in locating.

research concerning my job duties

gathering information

for work--get information

See previous

Providing information

Seeking NIEHS-related information

paper work

required coursework

see previous answer of open text

retrieving documents

searching for information etc etc

25. If you cannot easily navigate the internal NIEHS web pages and applications, which sections do you find hard to get around in?

List of answers

Overall comments

To a great extent I don't go to the Junction unless I already know where to find what I need.

I have a hard time finding what I am looking for. But don't think the NIEHS website is all that bad.

There are some things which appear to be hidden (at least to me), e..g., Board of Scientific Councilors future schedule.

The Health and Safety, Human Resources and Computing Guide (among others) are a joke in terms of ease of use.

some things are easy, so aren't.

Any information regarding general institute procedures.

Search

The search engine sucks!

The search engine is useless.

The search function on the Junction is terrible. If I don't know where the page or info I'm looking for is located, it is pointless to use the search function. It is easier to click and look through pages where I know the information is most likely to be.

The search robot does not retrieve relevant documents and pages.

The search engine is difficult to use.

i find myself using the search tool to try and locate things, unfortunately most of the pages are out of date. For example, say i need the troubleshooters to come install a shelf. a search is useless, try it. finally, i have some waste (potentially hazardous) i need picked up, try finding that one too. these simple tasks should be easily found through the junction or at least with a simple search.

Information is hard to find (no good search function)

The NEIHS internal website search function is USELESS

search engine never gives me what I am looking for!!

search engine at junction is worthless.

All of them

All of them.

Again, Im not sure what you mean by an internal application. Its just plain hard to figure out where the information you are looking for is squirreled away.

In general, the site is cumbersome.

I don't find the site the least bit intuitive - the links are in places I wouldn't expect, the link names are not easily recognized or understood in many cases, the pages do not flow easily or intuitively, etc. Basically, the site is not user friendly at all.

All sections are generally poor and cluttered

Most of it

All

I am just not very good at these things.

All

Nothing

Not applicable. It is a good website.

CA usually find my way through

Scientific resources

things are organized strangely under scientific resources

HR

HR!!!!

HR, Facilities - it's hard to figure out who to contact when you need something done.

I find HR information to be the most difficult.

I have a hard time finding what I want on the HR section

Human resources

The amount of information in the Human Resources section is overwhelming.

HR information;

Calendar

Calendar is a pain!

Our calendar and conference room scheduling system is not very good. Having to go into the calendar to find a conference room navigating as it is is difficult.

Master calendar - has too many things or often missing the talks that you want to see

The calendar is poorly designed when trying to go from month to month to find availability of conference rooms particularly if one plans a meeting six or nine months in advance. Have to page through all the months instead of having a search capability

Core Labs

Trying to find core labs. There should be easy links to the important areas that most people in DIR will frequent.

core labs

if I get lost it might be while looking for a document from a core facility, that's about it.

I can do it, but I think things are set up poorly, at least for my needs. For example, I used the confocal microscopy core a lot. That isn't even listed under 'core facilities'. huh??

Editing files once protocols/requests for service by core facilities have been submitted is difficult or impossible.

Junction Home page

From Junction, the selection of choices are not the ones I most frequently use, and many pages don't allow me to go to other frequently used areas.

Just not sure where to find things/how to navigate from junction home page. Organization is not clear.

Office of Management

Office of Management pages - they are very inconsistent and many are out dated.

OM website

Computing Guide

i find the computing guide hard to use.

Labeling

i find the use of acronyms and vague names such as moats, caresweb, and wms hard to figure out.

Get rid of "caresweb" heading - call it what it is "computer support".

DERT

DERT pages. I can't find what I'm looking for, the DERT pages are not linked appropriately, and when I find them, they are in non-intuitive spots. The designers clearly don't know much about DERT.

Facility services

HR, Facilities - it's hard to figure out who to contact when you need something done.

Facility service

Forms

Forms section - hard to find things

NIEHS forms

personnel and forms

mostly the forms section - much of the information is out of date or not easy to find

Up to date travel, HR forms, and other admin forms for DERT, NIEHS and HHS. Most of the forms are out of date and no one that I can find knows who is responsible for updating them.

Ordering

Web pages that require user input are frequently difficult to use. For example, to enter the name of my PI when ordering a standard product in MOATS there is what appears to be a text box that does not take user input. Instead, I must click a link that opens another window, enter his name there, and press submit. This seems needlessly difficult and must be done several times on the page.

Quality of Content

When you find a document, it is frequently out of date. There is too much false security that prevents people (including myself) but also fitness room, etc from having up to date information. It is too hard to update your information. The misplaced NIH version of concern for security makes our website useless.

Health and Safety

Additionally, information on lab waste disposal as well as training is difficult to find.

Site organization

I tend to use the search function rather than clicking through the hierarchy.

I don't find the menu intuitive for parts of the site I don't regularly use. Groupings seem arbitrary and I have tried several different menu items before I get what I want. Some of it seems arbitrary. I can't recall examples, but the annoyance is somewhat routine.

I don't like the tool bar to the right. Shading is too dark and information is inconsistent with right side of page. Page information is not standardized and too much emphasis on unrelated environmental science.

The problem is I don't know where they are. I must do search instead to find it and then even after that I do not know how to get there from the junction home page. For example, 'community outreach.' If you search for it you can find a lot of information but how to get there from the junction? I have no clue.

Mainly locating activities or programs, especially deficient is the access to NTP that is hidden within NIEHS web page. As a separate Program it should be given more prominence. Likewise not easy to get into Library also because buried as part of NIEHS and not listed on main junction page.

Finding what I'm looking for under the right category. Some categories seemed mixed or not listed in a logical order.

Often times I know what function I wish to perform, but finding the correct abbreviation/name/anacronym/link for what it is I wish to do is difficult.

You have to search several menus to find the appropriate website

my most common tasks are submitting waste, searching journals and databases, finding travel information and forms, and looking up contact and research information for scientists. These functions often require digging through several layers

Too much information is located on the different areas of the site. The site's present organization makes it difficult to navigate to specific information.

Suggestions

A simple cascading hierarchical menu system would be a vast improvement or a system similar to the NIH portal where relevant content is presented to the user in a subscription model and non-relevant content can be accessed on an as needed basis. iGoogle could also be used as a model.

the pertinent information on most internal sites is not easily accessible.

information within NIEHS. There is not much consistency among the websites. Also, the issue of posting 508 compliant documents which are provided to NIEHS by NIH and HHS as non-508 compliant requires turning documents into different formats. There seems to be an internal NIEHS delay in posting these finished files in a timely manner. There are many existing non-compliant files. The delay in posting new 508 compliant files and the need to create duplicate files has caused many to abandon the use of the intranet and provide hardcopy files or send the files by email.

Uncategorized

I don't know-

about NIEHS, NTP

some branches, labs, departments, individuals, etc. are not found on the intranet. There are gaps of need link to CMB like there is to safety

Need to make important and or news areas pop with color or graphics.

Described them before

Research Interests

I have also had trouble accessing my manuscripts on the submission database if the manuscript was uploaded by someone else (even just read-only would be nice).

This is also true about brochures and fact sheet webpage. [The amount of information is overwhelming.]

Request article

Library resources

Acquisition Management

going backwards and forwards to certain sites eg from internal to external NIEHS to NTP some of the password protected areas.

I am pretty comfortable navigating the library's site.

26. What resources do you think are missing from the NIEHS internal web pages? (list and rank 1 (least important) -5 (most important))

Items scored 1 (least important)

a link for tomorrow's events on the master calendar in case someone is actually planning ahead!

a link to titles or abstracts of recently published papers from intramural research at NIEHS would be nice (but not urgently needed, would rank maybe 1-2 for me).

Items scored 2

Up-to-date

Up to date HR information

Misc.

why not some images? bored with blue

A customizable front page would also be nice. Then I can have areas I use immediately accessible.

Items scored 3

Navigation

better organization

Misc.

Single log-in requirement for all services. Instead of logging in with a username and password for media, then supplies. Have a login session created so you can go from the Supply Ordering to Media ordering without constantly entering in username credentials.

links to groups at niehs, like eaac or diversity council etc to encourage interest and let people know what is going on.

creation of personalized 'junction' like 'igoogle'

Job opportunities

NIEHS Postdoc resources

Items scored 4

Up-to-Date

Up to date and easily organized travel, HR and administrative forms (Conflict of Interest forms etc.

NIEHS internal web pages are sometimes not updated regularly (for example, the exercise and fitness room page is very outdated). I think updated web pages are very important, so I would rate it a 4.

A better "who we fund page" is also needed. I'm not convinced this information is accurate. While we were working on the GEH page for Dr. Suk it came to our attention that the publications are not loading properly. Again we should talk about how we could/should revamp this. I think lots of external folks use it to look at our portfolios. Again this is a fairly high priority for me - a 4. These two items need to go on an agenda for discussion with DERT.

Navigation

better links to core facilities

a busier site with easier access to info. why click 5 times to get to the info you need? like getting to journals in the library. ugh!

Organization of the entire site could be improved.

Search

better search tools

better search capability

Misc

Scientific web pages with links to websites and databases commonly used by and accessed by scientists in the institute with training documentation (EMBOSS, PFRED and secondary structure predictors, PDB, etc..)

NIEHS Portal structure or applet for NIEHS to be added to the NIH Portal

FAQ list

A mechanism whereby scientists can follow where paperwork is in the command chain. This pertains to orders as well as personnel actions.

New Employee guide

Links to NIH/HHS tools in a reasonable manner

I would like the directory to have pictures

In the previous questions you talk about SPIRES. Is that NIEHS spires or NIH spires. Apparently there is a difference we need to discuss why we are supporting an internal SPIRES system. Linking to the NIH spires is a high priority for me - level 4.

Items scored 5 (most important)

Up-to-Date

keep the website more up to date

Up to date information

Real information for employees

up to date links for information

Facilities up-to-date webpages

make sure things people search for are up to date

Up to date/current info is most important and #5, urgently needed.

Navigation

A frontpage with better navigation menus to find information

Easy navigation

a consistent structure

A well-organized site map or index

a better organization of the site, such that when you go to the home page, it is easy to see what to click on to find what you need

better navigation tools

Search

Powerful search engine

Better search engine

proper search function

A search engine that actually finds the specific page you need, not old outdate and irrelevant info.

A better search engine

Google based search engine (google appliance)

make it easier to search for things - you must need to revisit keywords or something because it is very hard to find forms, templates, etc.

search engine

Misc.

IRB & associated project review

branch-specific calendars

branch-specific topical groups

a discussion board or blog so we can reduce all hand emails

better ability for groups and individuals to update their web pages and post new information

make master calendar easier to use

Web page editing

PubMed

NTP and NIEHS Publications

NTP members like NCTR/FDA and NIOSH/CDCP and NCI/NIH and CPSC and others

NIEHS Ethics website

List AoS access on Junction

New postdoc "To Do" things

#1 more interactive: i would like for it to be more portal oriented - so that I could add the gadgets I use.

Items listed but not ranked

Navigation

proper information architecture

consistency of templates used to present information

with better organization, it will probably become very useful to people.

It is difficult to find the list of Core labs.

Most of i need is on the website. I needs be reorganized better. Only half of the page is being used.

enhancing usability/web page layout/content

Search

search function

I think a more powerful search engine is critical.

A way of avoiding getting a long list of news items when your searching for current web content.

Good search engine

better searching

A functional search feature;

Misc

consistency of formatting / writing styles of pages

I think the site is perfect. No need to make it more fancy as long as it is practically usable.

stuff to buy or sale

final documents prepared by oter staff members/offices that may be useful to others

highlights from leadership meetings

not inerested-

link to CMB resources like the is to safety.

A true and current organization chart, with contact information including mail drop, phone, fax and actual email address not dependant on the online address book would good.

Current subject area assignments for grants administrators would help, update monthly.

links with updated contact information; A how to guide for new members of NIEHS would be THE AWESOME!

(bi)monthly update highlighting a few papers with exciting new research findings within NIEHS (4) to advertise NIEHS

need more graphics.

Interactive training registration and completion/ requirements

Easy waste disposal information

Share the look and infrastructure of the external page (with different colors).

Two additional pieces that would be helpful include: local weather and traffic information

benefits, forms

I have no idea.

It would also be nice not to have to log in umpteen times to get to (specific) internal websites.

Email access from house

Group meeting scheduling functions like Meet-o-matic

Simple large file sharing to collaborators like Yousendit.com

HR policies

27. What other ideas do you have for improvements to the NIEHS internal web pages and applications?

Total skipped: 161

Total answered: 43

Overall

The people locator is surprisingly useful in comparison to the rest of the site.

I'd settle for a smoother version of what's available, unless additional staff is added to the site. All depends on update and maintenance. I'd rather have a simpler tool that is high functioning than a more imaginative and creative one that requires much learning and creates frustration and annoyance.

Content

Update them!

Bring back some of the old content, for example the old airborne site with all the allergen/asthma information.

plain english.

update all information

Permit contractors who are providing services to NIEHS researchers to have and maintain webpages on the intranet to make researchers aware of the services they provide.

Consistency

Consistent look and feel between applications.

Unifying menu

Search

A search function that actually works.

Greatly improve search engine.

powerful search,

Improve search engine

improved search functionality

Better internal search engine

Events / Calendar

more info about some of the events we are sponsoring --abstract type info. or bios of presenters to help determine should I or should I not attend?

better calendars, meeting organization software improvements in meeting room reservation pages

Technology

More use of AJAX programming and testing on IE, Firefox and Safari for compatability and speed.

No Flash usage at all.

Consistent programming library for all in house generated programs, recommend using a toolkit of pre-defined re-usable AJAX code such as Google Web Toolkit (<http://code.google.com/webtoolkit/>)

Mozilla XUL

xScope from IconFactory

Using these one toolkit with re-usable elements across all enterprise applications and pages will result in a much better and consistent look and feel. This will keep user training requirements to a minimum.

Remote Access

Authorization to access from home PC will be appreciated

Multiple Logins

login is not always simple

Content Management

For internal pages it would be nice to be able to upload information on a daily basis rather than going through web folks.

The main thing is make it easier for individuals and groups to keep their webpages and documents on them up to date.

If information has not been updated (e.g., an internal web page with a highlighted link to "New Information," from 2002), simply take it down.

Make it easier to know who the website manager is and what the process is to submit information to be updated.

Look and Feel

Better design

uniform look and feel.

it's not too pretty to look at--looks quite dated

redesign the junction homepage

Changing basic color from green-gray to more mild color.

Organization / Navigation / Findability

have a focus group to define what the categories are on the front page...they are not so equally distributed

core labs, research support, and scientific resources should be only 1 click away from the junction. For example, say you want to use the the flow cytometry center. you click on core labs from the junction but the flow center isn't listed. is it under research support or scientific resources? why not list all these links on one page, you could use 3 headings.

more organized structure

Make it easier to find application for scheduling room access. It's not intuitive on the employee website.

The categories on the main page are not very intuitive. In fact, nothing at this institute is intuitive. You have to find someone who already knows how things work in order to do something. For example... ACRONYMS AND ABBREVIATIONS SUCK! DO NOT MAKE THEM LIKE THE NIEHS PUBLIC WEBSITE. IT IS ONE OF THE WORST LAYOUTS FOR WEB PAGES OUT THERE.

integrate things! also, for a long time at least, some of the links pointed to outdated pages. I had a LOT of trouble finding forms when I was doing an Animal protocol because of this. not sure if this has improved, but this was a big issue.

Easier use and better linkage among programs

fix broken links

Organization is the key for any website to run smoothly. There are better ways to organize the information presented.

better organization (use drop down menus if required)

Better organization and easy to use.

ABC ORDER FOR SIDE MENU IS A BAD, BAD IDEAS AS IMPORTANT ITEMS ARE NOT LISTED 1ST.

Nothing

No more. It is good enough.

Not at this time-

none

Personalization

Ability to customize the page in my own Office PC.

Aggregation of frequently used pages

Not categorized

Easier link to First Environments Day Care web page. I recently had to go to this page and had to go through several links to finally find what I was looking for.

Need to move announcements out of email and onto the web site.

DIR is better to be more visible

I think when you look up a person you should see their picture (perhaps from their ID badge), but it would be helpful to see the name and the face.

secure employee to employee instant messaging (if possible)

life @ niehs blog -- and a safe venting place on line to make suggestions

a lot of info is not too much. it is useful. check out this website <http://www.epa.gov/>

A system to track paperwork (ordering and personnel actions)

see answer to last question.

This survey is a good start.

Having a generic sitemap for the entire website would be rather helpful.

28. Please list any other web resources you use that are particularly relevant to the work you do at NIEHS.

Total skipped: 161

Total answered: 43

Pubmed and Google, can't exist without them.

Google to locate email addresses and phoen numbers for faculty and staff at universities.

google,

google

Google (probably obvious

google,

Google.

Google is a good test – usually it beats any search function on the internal site, it's faster and it is more intuitive in turning up what you want without a lot of "blindfolded" feeling around.

google (to search for wikipages mostly, but also for conferences etc)

Google,

Often use Google

Google, yahoo search engines

Google,

Gmail,

wikipedia, ... etc

Wikipedia

Wikipedia,

pubmed (constantly using that)

PubMed

PubMed,

Pubmed

pubmed

pubmed

PubMed

PubMed

pubmed,

www.pubmed.com

NIH main website to find policies and manuals.

NIH web site;

NIH website

NIH Electronic Journals

nih.gov

NIH Intramural Database

The NIH Portal is very good.

NIH library

<http://www.ncbi.nlm.nih.gov>

NCBI,

NCBI

Merriam Webster

<http://genome.ucsc.edu>

iTunes radio- It is pleasant to listen to different types of music while working. I host international scientists who feel happy when I can locate a familiar type of music while they work, also.

HHS web site.

hhs.gov

eSPA is a critical portfolio analysis tool that is just coming out of NIAID and will be used at NIH.

I have started to realize the potential of facebook for group projects but have not started to use it for that.

NSF pages,

EPA pages,

webinars

Molecular Biology calculators

SPIRES,

CRISP,

As mentioned before, each postdoctoral/grad/step student/ scientist should have a page listing the contact information, CV, publications, scientific interests and collaborations and future goals.

ISI

Medline

eeoc.gov

opm.gov

mpsb.gov

electronic journal accesss

E-mail

Internet

Web of science

NEDD

Annual reporting

Alerts

climateregistry.org

epa.gov

ncbiotech.org

local groups and collaborators of interest

www.pdb.org

Ecocyc

There should be a direct link to NLM, data mining tools

Ordering companies (i.e. sigma-aldrich, VWR, BD Biosciences, Invitrogen, and many others)

IDTDNA (esp. the SciTools)

Articles from journals

websites from major top universities and journals

society websites

collaborators websites

wiki,

scansite,

expasy,

hrpd,

netphos,

polydoms-SNP,

invitrogen,

biorad,

swissprot

QUOSA

NTP

EPA AND OTHER FEDERAL ENVIRONMENTAL AND HEALTH AGENCIES SUCH AS OSHA, ATSDR, DOE, OTHER NIH AND DHHS WEBSITES.

OUTSIDE GOVERNMENT:

SCIENCE, APHA.ORG, ACGIH.ORG, AIHA.ORG, BNA OCCUPATIONAL RESOURCES, AND OTHER COLLEGE WEBSITES.

online buffer and molecular weight calculators

can not think of any right now.

n/a

I do not have any specific ones.

don't have any-

8 APPENDIX D: USABILITY TEST SCRIPT

8.1 Introduction

As part of the assessment, SRA will be conducting usability tests with several NIEHS staff members using the attached script. Also included in this document are sample usability test tasks that can be used with specific NIEHS audience types.

8.2 Purpose and Scope

The attached script is designed to test the usability of the Junction when performing general tasks that that every employee performs in his or her day-to-day job. Example general tasks include the following:

- Find a phone number or contact information for another staff member;
- Request IT support;
- Make a facilities request (such as moving equipment or replacing light bulb);
- Fill out timesheet (except for trainees);
- Register a visitor with security;
- Search for personnel issues related to position;
- Look at Cafeteria menu;
- Post an item for sale in the Trading Post;
- Find current NIEHS or NIH policies and procedures;
- Share documents with others;
- Access shared documents;
- Locate trainings to take;
- Keep track of trainings taken; and
- Locate orientation material.

This test script can be reused once the NIEHS intranet has been redesigned to benchmark improvements in usability. During the NIEHS Intranet Assessment, SRA identified six audience types within NIEHS staff: the Manager, the Lab Technician, the Scientist, the Administrative staff, the Secretary, and the Trainee. Each of these audience types have distinct tasks that they use the Junction to accomplish. In addition to the general tasks included in the attached script, this report includes samples tasks that can be used when testing the site with specific audience groups.

8.3 Usability Test Script – Audience Specific Tasks

This section contains tasks that can be added into the script in section 3 when testing the usability of the NIEHS Intranet site with specific audience types.

Audience Type: Manager

Task 1: You are interviewing a potential new employee next week and you want to send them an informational brochure about the NIEHS. Find a brochure to send them.

Task 2: Two of your employees are having problems getting along and you cannot resolve the issue yourself. Where can you go for additional support?

Task 3: One of your employees has asked for a promotion. What guidelines do you have to follow to promote him?

Task 4: You are trying to convince a very talented student to come to NIEHS for a fellowship and you want to share with her the latest articles coming out of the Institute's research. Where can you find this information?

Audience Type: Lab Technician

Task 1: You have some hazardous material that needs to be disposed of. What do you need to do to make sure you that it is taken care of properly?

Task 2: You need some work gloves in size extra-large and all there are in your lab are size small gloves. Is this something you can get in the self-service store, or do you need to order them from somewhere else?

Audience Type: Scientist

Task 1: You have some hazardous material that needs to be disposed of. What do you need to do to make sure you that it is taken care of properly?

Task 2: You need some work gloves in size extra-large and all there are in your lab are size small gloves. Is this something you can get in the self-service store, or do you need to order them from somewhere else?

Task 3: For you current experiment, you need to submit a sample for bioanalyzer analysis. What lab does this? In addition, what is the first step to submit your sample?

Task 4: You have been researching the impact of nicotine exposure on *C.elegans*. Find the latest research that is relevant to what you are doing.

Audience Type: Administrative Staff

Task 1: You want to schedule a meeting with your workgroup for next Wednesday afternoon. What rooms are available for this meeting?

Audience Type: Secretary

Task 1: You need to get the most recent version of the NIEHS letterhead. Where can you go to get that?

Task 2: You need some toner for the printer in your office. Is this something you can get in the self-service store, or do you need to order them from somewhere else?

Task 3: Your boss took a taxi and wants to be reimbursed. How do you request reimbursement?

Audience Type: Trainee

Task 1: You have some hazardous material that needs to be disposed of. What do you need to do to make sure you that it is taken care of properly?

Task 2: You need some work gloves in size extra-large and all there are in your lab are size small gloves. Is this something you can get in the self-service store, or do you need to order them from somewhere else?

Task 3: For you current experiment, you need to submit a sample for bioanalyzer analysis. What lab does this? In addition, what is the first step to submit your sample?

Task 4: You have been researching the impact of nicotine exposure on C.elegans. Find the latest research that is relevant to what you are doing.

Task 5: You have heard that there are events held at NIEHS specifically for trainees. What is the next event coming up?

Task 6: You need some advice on what your options are after your NIEHS fellowship has ended. Where can you go for help?

8.4 Usability Test Script

This section contains a script and log sheets for usability testing with any NIEHS staff member.

Usability Testing of the NIEHS Intranet

Date: _____

Time: _____

Test No. : _____

Logged By: _____

Session Times: Start: _____ Finish: _____

Overall Notes

Introductions & Purpose

My name is _____ and I am a consultant with SRA International working on an assessment of the NIEHS internal web sites.

This week my colleagues and I are meeting with a number of people to watch them use the Junction to identify areas that need improvement. We really appreciate your participation. Our goal is to make the Junction and other NIEHS internal web sites easier and more efficient to use and you are help us do that.

During the session, I am going to ask you to use the web site on the computer in front of you to complete some tasks. Please remember that there are no right or wrong answers. We are not testing you, your knowledge, or your ability to use the Internet. We are here to test the Junction and other online tools and learn from your experience.

I will be facilitating our session today and taking notes. One or more of my colleagues may join me to observe and take notes.

These notes will only be used internally within NIEHS program for our purposes in improving the Junction. They will not be used for any other purpose. Neither your name nor any of your personally identifiable information will be stored or used with these notes.

Task Briefing

During this part of the session, I will ask you to complete up to 7 tasks and will be watching your actions on the computer. I realize this is not the most natural way to work, but please try as much as you can to relax and just do what you would do as if I were not here.

At this time, I would like to stress that we are observing use of the web site, *not* your abilities. If you find aspects of the web site difficult to use or understand, so will other people, and it will be our job to make sure that we make appropriate changes to improve it. As we have discussed, identifying these areas is the key purpose of our session today.

I will be interrupting your work throughout this session to ask you specific questions about your use of the web site. I will also ask you to “think out loud” as you work so that I may better understand your thought process when using the web site. For example, if you do not know what something is used for, please say “I don’t know what this is for” or something similar. I may also prompt you from time to time to ask you what you are thinking. Tell me what you are going to do and why, your understanding of the information we are dealing with, and if there is anything that you are not sure of or are confused by. If you should become particularly frustrated and would like to quit a task, please let me know.

You can ask me to repeat the task if you forget what I’ve asked you to do. However, I will not be able to answer questions or give you help about the application itself.

Do you have any questions before we begin?

Task Completion

We have up to seven tasks for you perform using the web site today. I will give them to you one at a time and recite the contents to you before you begin each task so that you may ask any questions before you begin.

Task 1

You met Cheryl Thompson at a meeting last week. Find out what office she works in and her phone number.

| User Comments/Attitude: | Successful? |
|--|---|
| <input type="checkbox"/> Positive (e.g. enthusiastic, completed task effortlessly) | <input type="checkbox"/> No |
| <input type="checkbox"/> Neutral | <input type="checkbox"/> Yes (at/near time limit) |
| <input type="checkbox"/> Negative (e.g. annoyed, frustrated) | <input type="checkbox"/> Yes (quickly) |
| <input type="checkbox"/> Confused | |

Observations:

Task 2

Your performance plan is due soon and you deleted the email that had the link to what you needed to fill out. Find the form that you need to fill out.

| | |
|---|--|
| User Comments/Attitude: <input type="checkbox"/> Positive (e.g. enthusiastic, completed task effortlessly) <input type="checkbox"/> Neutral <input type="checkbox"/> Negative (e.g. annoyed, frustrated) <input type="checkbox"/> Confused | Successful? <input type="checkbox"/> No <input type="checkbox"/> Yes (at/near time limit) <input type="checkbox"/> Yes (quickly) |
|---|--|

Observations:

Task 3

A colleague is coming to visit you at work and you need to make sure that she can get through security. Find out what you need to do to make sure she can get in.

| User Comments/Attitude: | Successful? |
|--|---|
| <input type="checkbox"/> Positive (e.g. enthusiastic, completed task effortlessly) | <input type="checkbox"/> No |
| <input type="checkbox"/> Neutral | <input type="checkbox"/> Yes (at/near time limit) |
| <input type="checkbox"/> Negative (e.g. annoyed, frustrated) | <input type="checkbox"/> Yes (quickly) |
| <input type="checkbox"/> Confused | |

Observations:

Task 4

You have just had a child and would like to enroll them in childcare here at NIEHS. What is the name of the childcare facility?

| User Comments/Attitude: | Successful? |
|--|---|
| <input type="checkbox"/> Positive (e.g. enthusiastic, completed task effortlessly) | <input type="checkbox"/> No |
| <input type="checkbox"/> Neutral | <input type="checkbox"/> Yes (at/near time limit) |
| <input type="checkbox"/> Negative (e.g. annoyed, frustrated) | <input type="checkbox"/> Yes (quickly) |
| <input type="checkbox"/> Confused | |

Observations:

Task 5

You heard about a training class on MS Word that you are interested in taking. When is the next session being offered?

| | |
|---|--|
| User Comments/Attitude: <input type="checkbox"/> Positive (e.g. enthusiastic, completed task effortlessly) <input type="checkbox"/> Neutral <input type="checkbox"/> Negative (e.g. annoyed, frustrated) <input type="checkbox"/> Confused | Successful? <input type="checkbox"/> No <input type="checkbox"/> Yes (at/near time limit) <input type="checkbox"/> Yes (quickly) |
|---|--|

Observations:

Task 6

One of your overhead lights burned out. What do you need to do to get it replaced?

| | |
|---|--|
| User Comments/Attitude: <input type="checkbox"/> Positive (e.g. enthusiastic, completed task effortlessly) <input type="checkbox"/> Neutral <input type="checkbox"/> Negative (e.g. annoyed, frustrated) <input type="checkbox"/> Confused | Successful? <input type="checkbox"/> No <input type="checkbox"/> Yes (at/near time limit) <input type="checkbox"/> Yes (quickly) |
|---|--|

Observations:

Task 7

You are planning on working from home this weekend and have never done it before. Find out what you need to do to connect to the network from home.

| User Comments/Attitude: | Successful? |
|--|---|
| <input type="checkbox"/> Positive (e.g. enthusiastic, completed task effortlessly) | <input type="checkbox"/> No |
| <input type="checkbox"/> Neutral | <input type="checkbox"/> Yes (at/near time limit) |
| <input type="checkbox"/> Negative (e.g. annoyed, frustrated) | <input type="checkbox"/> Yes (quickly) |
| <input type="checkbox"/> Confused | |

Observations:

9 APPENDIX E: USABILITY TEST RESULTS

NIEHS Intranet Assessment Usability Testing Results

Task 1

You met Cheryl Thompson at a meeting last week. Find out what office she works in and her phone number.

| | Overall Comments / Attitude | Successful? | Time |
|----------------------|-----------------------------|--------------|--------|
| Participant 1 | Positive | Yes, quickly | :26.5 |
| Participant 2 | Positive | Yes, quickly | 1:22.1 |
| Participant 3 | Positive | Yes, quickly | :09.9 |
| Participant 4 | Neutral | Yes, quickly | :33.7 |
| Participant 5 | Positive | yes, quickly | :15.4 |

Observations

- P1, uses people locator. Saw that Cheryl worked for "OCPL, whatever that means" (office acronym not spelled out or explained anywhere)
- P2 enters first and last name into people locator
- P3, people locator
- P4, people locator
- P5, people locator

Task 2

Your performance plan is due soon and you deleted the email that had the link to what you needed to fill out. Find the form that you need to fill out.

| | Overall Comments / Attitude | Successful? | Time |
|----------------------|-----------------------------|----------------------|--------|
| Participant 1 | Negative | no | 4:19.4 |
| Participant 2 | Confused | Yes, near time limit | 6:59.8 |
| Participant 3 | Negative | No | 3:18.9 |
| Participant 4 | Negative, confused | No | 3:16.6 |
| Participant 5 | Negative | No, gives up | 2:57.6 |

Observations

- P1 Looks first in Human Resources / EEO → Forms → Admin, doesn't find form
- P1 Finds a form that is in Filemaker Pro, but participant does not have that program

- P1 would have given up much earlier “I’d be emailing our secretary saying, ‘Email me another copy’”
- P1 goes to NIH after finding a link under “external forms,” finds another form that looks kind of correct, but is not the right one
- P2 goes to Admin → forms “I don’t know the number of this form”
- P2 goes to personnel-related forms
- P2 goes to human resources → guidance
- P2 searches for performance plan, gets to NIH portal and logs in
- P3 goes to forms → personnel related → performance plan “oh I have choices”
- P3 expected form to launch and instead was brought to another page of links
- P3 sees “IPP” guess that that means Individual Performance Plan, but not sure.
- P3 does not have Filemaker pro so cannot launch form
- P4 goes to NIEHS forms and clicks IRTA since she is a fellow (thinks that this section would apply to her)
- P4 scrolls up and down the forms page but doesn’t see anything
- P4 clicks on “Personnel related” but is taken to another list of links which she did not expect “this is kinda weird – I expected to find the form, not another list of links”
- P4 “I probably wouldn’t go to the junction – I’d just email the secretary”
- P5 goes to Human Resources page – scans it but doesn’t click on anything
- P5 searches for “performance plan form”
- P5 gets to forms under employees resources - tries to launch filemaker pro file – doesn’t have that program
- P5 gets to the “Doors” Human Resources page – gives up
- P5 tries again – goes to admin resources – then really gives up

Task 3

Your colleague is coming to visit you at work and you need to make sure that she can get through security. Find out what you need to do to make sure she can get in.

| | Overall Comments / Attitude | Successful? | Time |
|----------------------|------------------------------------|--------------------------------------|-------------|
| Participant 1 | Positive | Yes, quickly | :26.8 |
| Participant 2 | Neutral | Yes | 3:03.0 |
| Participant 3 | | Yes | 4:15.6 |
| Participant 4 | Postive | Yes, quickly | :11.6 |
| Participant 5 | Negative | No (but the application is freezing) | 2:53.0 |

Observations

- P1 says “I have done this task 100 times”
- P1 Has to login once he clicks on “visitor registration” - “I have to put in my password 10 times a day” (frustration)
- P2 “normally [he] just picks up the phone”
- P2 goes to campus security, then clicks on link for “security office” which launches his email. He did not expect this to happen (expected a web page)
- P2 finds link for registration
- P3 says “I’ve done this before”
- P3 clicks on Campus security “oh, this doesn’t look like what I’ve done before”
- P3 goes to Visiting NIEHS – “no this isn’t it”

- P3 finds Visitor Registration - has log in issue
- P3 "I expected to see 'Visitor Information & Registration' or 'Visiting NIEHS'
- P4 "I've done this before"
- P5 goes to Visitor Registration and has to enter user name and password "the system should know me – why do I have to enter my name?"
- P5 the application is freezing so is unable to complete

Task 4

You have just had a child and would like to enroll them in childcare here at NIEHS. What is the name of the child care facility?

| | Overall Comments / Attitude | Successful? | Time |
|----------------------|------------------------------------|--------------------|-------------|
| Participant 1 | Positive | Yes, quickly | :59.7 |
| Participant 2 | Positive | Yes, quickly | 1:30ish |
| Participant 3 | | Yes | 1:31.5 |
| Participant 4 | Positive | Yes | :45 |
| Participant 5 | Positive | Yes, quickly | 1:04.3 |

Observations

- P1 searches "NIEHS Child Care"
- P2 goes to HR → work/life → work /life programs , finds childcare
- P3 searches "child care", finds a page called "child care enrollment" that has no navigation or context - but is able to find name of facility in the middle of the page
- P4 scans the front page, then searches "childcare services"
- P4 "I'm expecting to get a lot of weird results"
- P4 is surprised when the results are useful
- P5 searches "child care facility"
- P5 finds a page that gives her the correct information but notices that the page has no title "you would think they'd have the name [of the facility] on the top"

Task 5

You heard that there is a training class on MS Word that you are interested in. When is the next session being offered?

| | Overall Comments / Attitude | Successful? | Time |
|----------------------|------------------------------------|--------------------|-------------|
| Participant 1 | Positive | Yes | 1:43.8 |
| Participant 2 | Positive | Yes | 3:02.0 |
| Participant 3 | | Yes | 1:16.9 |
| Participant 4 | | Yes | 2:04.8 |
| Participant 5 | Confused | No, gives up | 3:08.2 |

Observations

- P1 goes to CARES web first
- P1 would think to go to NIH next, but “tries to avoid going there”
- P1 Goes next to computing guide, then help, the finds schedule
- P1 says, “I’d probably email my CSP or go through my emails because I know they send the schedule out”
- P2 goes to Computing Guide, looks for training
- P3 goes to Computing Guide → Training
- P3 says “this name is not intuitive”
- P3 says “I’ve taken a lot of classes [so I knew] to look in the Computing Guide
- P4 goes to Master Calendar first “it’s so overwhelming that I don’t normally go there”
- P4 searches for “Microsoft word class” on the master calendar
- P4 expands her search to search the whole week and not just the day
- P4 then goes to the computing guide → training → course schedule
- P4 “that’s weird that it didn’t show up on the master calendar”
- P5 looks first on Master Calendar and looks to filter the events by ‘Training’
- P5 comments that she doesn’t like that you can only look at the calendar day-by-day
- P5 searches Master Calendar for “training MS Word”
- P5 leaves the Master Calendar – “you’d think there would be a link for training [somewhere on the Junction]”
- P5 searches for “onsite MS Word Training”
- P5 goes back to Master Calendar but then gives up - “I don’t know how to find it”

Task 6

One of your overhead lights burned out. What do you need to do to get it replaced?

| | Overall Comments / Attitude | Successful? | Time |
|----------------------|------------------------------------|--------------------|-------------|
| Participant 1 | Confused, frustrated | No | 3:00 ish |
| Participant 2 | Positive | Yes | 2:01.0 |
| Participant 3 | | Yes | :23.8 |
| Participant 4 | | Yes | :53.7 |
| Participant 5 | Neutral | Yes | 2:08.5 |

Observations

- P1, “First thing I’d do is call Facilities. They’d send me to NIH and it would take weeks”
- P1 “I’ve never done this before” (used the computer to file a request)
- P1 scrolls through all the options on the left side before finding facilities
- P1 “Honestly, I wouldn’t even do this – I have a history that this is a disaster. I’d pick up the phone. ...It’s a matter of knowing people - I’ll call or find someone I know”
- P1 “I’ve stopped using the search because the results were irrelevant”
- P2 trying to find Facilities – scans center list first, finally sees it in the left nav
- P2 goes to Facilities → Work Request → property management → Maintenance request
- P3 picks up the phone...
- P3 finds facilities help desk
- P3 “hopes someone eventually responds” - - has done this before and never received an email confirmation

- P4 "I'd probably just call one of the troubleshooting people because facilities takes a really long time and because you're calling up to NIH"
- P4 finds the right information but says she'd "probably just call because the online stuff gets really complicated"
- P5 wants to call troubleshooter
- P5 goes to facilities page but doesn't see the "Submit Online" link. Says, "ain't got no clue what to do on here"
- P5 finds "Maintenance Request" – clicks this link

Task 7

You are planning on working from home this weekend and have never done it before. Find out what you need to do to connect to the network from home.

| | Overall Comments / Attitude | Successful? | Time |
|----------------------|------------------------------------|--------------------|-------------|
| Participant 1 | | No, gave up | 2:00 ish |
| Participant 2 | Positive | Yes | 1:18.8 |
| Participant 3 | | Yes | :52.0 |
| Participant 4 | Negative , confused | Yes | 3:26.5 |
| Participant 5 | Negative | No | 6:04.6 |

Observations

- P1 goes to CARES web to file a request with CSPs. "I've had a lot of good luck with CSPs – I rely on them a lot"
- P1 goes to computing Guide looking for 'remote access' or 'telecommuting'
- P1 see that he needs "approval" to request telecommuting and thinks that anything requiring approval takes forever (thus impossible by "this weekend") and gives up
- P2 goes to Human Resources → work / life → telecommuting opportunities → "telework preparation steps." Finds a phone number
- P3 goes to Computing Guide → remote access → finds form
- P3 when she notices that "approval" is necessary, says. "takes forever until you get your approval"
- P4 goes to computing guide → remote access telecommuting policies and guidelines
- P4 wonders if "this applies to me" because there are different security levels and procedures for people "who work with secure versus non secure data"
- P4 looks at remote access approvals but isn't sure if that's for the web site or for the whole network
- P4 "doesn't need the definition of what is remote access" – needs the FAQ upfront
- P4 expects that approval will take a long time
- P5 says, "Oh crap – I have to find that form"
- P5 searches "VPN form" – nothing
- P5 scans the Junction homepage very quickly then scans the forms page, not really reading - skips over Computing Guide several times
- P5 looks for the word VPN somewhere on the forms page
- P5 looks under Admin Resources & Forms - wonders "why there isn't a computer forms section" in the forms area

-
- P5 Gets to Computing Guide but never to the correct area
 - P5 says she would call her CSP who would do it for her

General comments

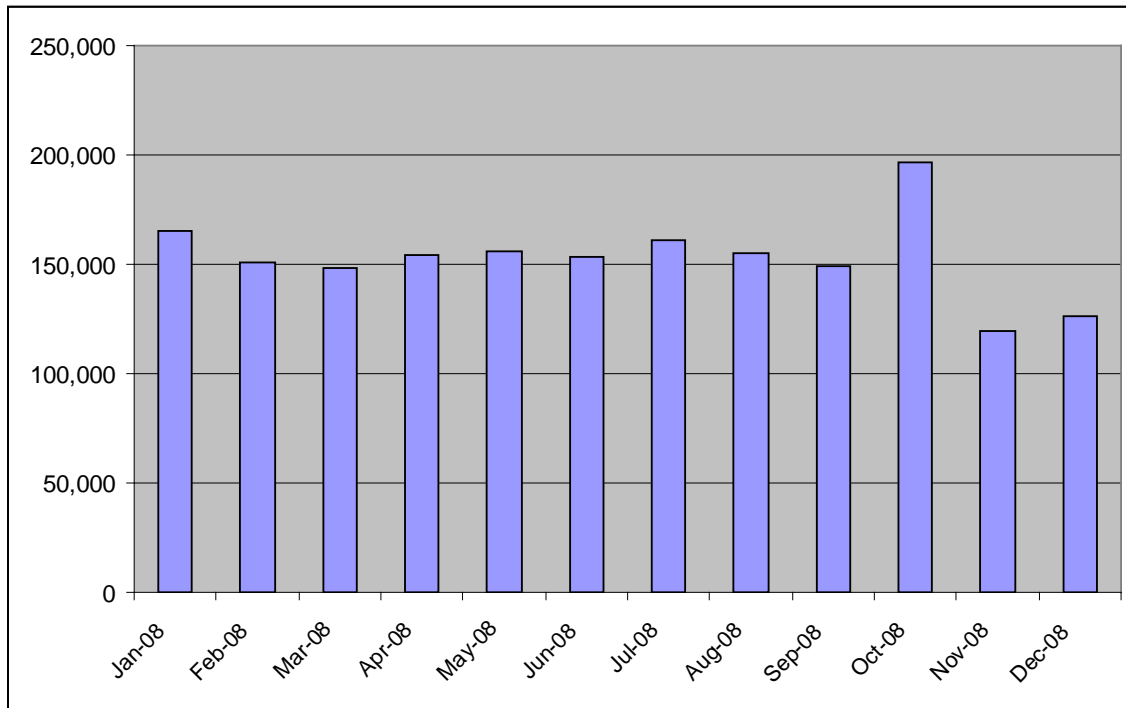
- P2 tries to know the form number when he looks for forms so he can search for it
- P3 finds the site map easier to use / understand
- P3 thinks the link names are not intuitive
- P4 would like to see pictures in MOATS – so she can tell the difference between types of flasks, bottles, etc
- P4 would like to be able to have repeat orders possible in MOATS - standing orders aren't that helpful because her needs are regular like that
- P4 Also in MOATs, it would be nice if PI and CAN can come up automatically
- P4 Need to clean out the recipes in MOATS – some of them do not exist any more
- P4 Naming conventions in MOATS would be useful
- P4 In library – wasn't sure if the journal link was referring to hard copy journals or online journals

10 APPENDIX F: NIEHS INTRANET 2008 STATISTICS

inside-www.niehs.nih.gov

Successful requests: 1,964,283
 Average successful requests per day: 5,367
 Successful requests for pages: 1,834,866
 Average successful requests for pages per day: 5,013

2008 Monthly Traffic



Top Pages

| | Page Name | Pageviews |
|---|---|------------------------------|
| 1 | Junction homepage (includes /junction/, /junction/index.cfm, /junction/home.htm) http://inside-www.niehs.nih.gov/junction/ | 1,211,636 303163 79475 |

| | Page Name | Pageviews |
|----|---|------------------|
| 2 | Cafeteria Menu http://inside-www.niehs.nih.gov/cafemenu/current.htm | 16,709 |
| 3 | Junction Site Map (includes /junction/indexjctc.htm and /junction/indexjctc.cfm) http://inside-www.niehs.nih.gov/junction/indexjctc.cfm | 14,442 6,018 |
| 4 | Supplies http://inside-www.niehs.nih.gov/omasb/logistics/supplyorders.htm | 9,166 |
| 5 | Administrative Resources (includes /junction/admin.cfm and /junction/admin.htm) http://inside-www.niehs.nih.gov/junction/admin.cfm | 7,911 3,191 |
| 6 | Human Resources / EEO (includes /junction/hr.cfm and /junction/hr.htm) http://inside-www.niehs.nih.gov/junction/hr.cfm | 5,596 2,120 |
| 7 | The OM Grapevine http://inside-www.niehs.nih.gov/grapevin/home.htm | 5,503 |
| 8 | Health and Safety Branch Homepage http://inside-www.niehs.nih.gov/odhsb/ | 4,204 |
| 9 | Scientific Resources (includes /junction/science.htm and /junction/science.cfm) http://inside-www.niehs.nih.gov/junction/science.cfm | 4,040 1,897 |
| 10 | Computing Guide http://inside-www.niehs.nih.gov/guide/home.htm | 3,766 |
| 11 | Core Laboratories (includes /junction/facilities.htm and /junction/facilities.cfm) http://inside-www.niehs.nih.gov/junction/facilities.cfm | 3,100 1,788 |
| 12 | About NIEHS, NTP and RTP (includes /junction/abtniehs.htm and /junction/abtniehs.cfm) http://inside-www.niehs.nih.gov/junction/abtniehs.cfm | 2,816 1,289 |
| 13 | Benefits and Payroll http://inside-www.niehs.nih.gov/omhrmb/benpay.htm | 2,787 |
| 14 | NIEHS Financial Management Branch (FMB) http://inside-www.niehs.nih.gov/omfmb/home.htm | 2,276 |
| 15 | Forms | 2,193 |

| | Page Name | Pageviews |
|----|--|------------------|
| | http://inside-www.niehs.nih.gov/junction/forms.cfm | |
| 16 | Calendar (includes /junction/events.htm and /junction/events.cfm) http://inside-www.niehs.nih.gov/junction/events.cfm | 1,979 1,849 |
| 17 | Jobs at NIEHS http://inside-www.niehs.nih.gov/vacancy/vacancy.htm (now redirects to http://www.niehs.nih.gov/careers/jobs/index.cfm) | 1,759 |
| 18 | Office of Acquisitions http://inside-www.niehs.nih.gov/omamb/home.htm | 1,747 |
| 19 | Travel http://inside-www.niehs.nih.gov/omasb/travel/home.htm | 1,743 |
| 20 | Radiation Safety http://inside-www.niehs.nih.gov/odhsb/radhyg/rad.htm | 1,741 |
| 21 | The Old NIEHS Website http://inside-www.niehs.nih.gov/ | 1,704 |
| 22 | The Computer Support Home Page http://inside-www.niehs.nih.gov/csp/ | 1,699 |
| 23 | Arts and Photography Home http://inside-www.niehs.nih.gov/ap/home.htm | 1,692 |
| 24 | NIH Office of Research Facilities http://inside-www.niehs.nih.gov/omfeb/orf.htm | 1,608 |
| 25 | NIH / NIEHS Remote Access Approvals http://inside-www.niehs.nih.gov/guide/remote/access.htm | 1,566 |
| 26 | File Not Found http://inside-www.niehs.nih.gov/junction/rtp.htm | 1,535 |
| 27 | Remote Access & Telecommuting http://inside-www.niehs.nih.gov/guide/remote/home.htm | 1,266 |
| 28 | New & Old Web Sites Index http://inside-www.niehs.nih.gov/webindex/index.htm | 1,133 |
| 29 | Administrative Services and Analysis Branch http://inside-www.niehs.nih.gov/omasb/home.htm | 1,106 |

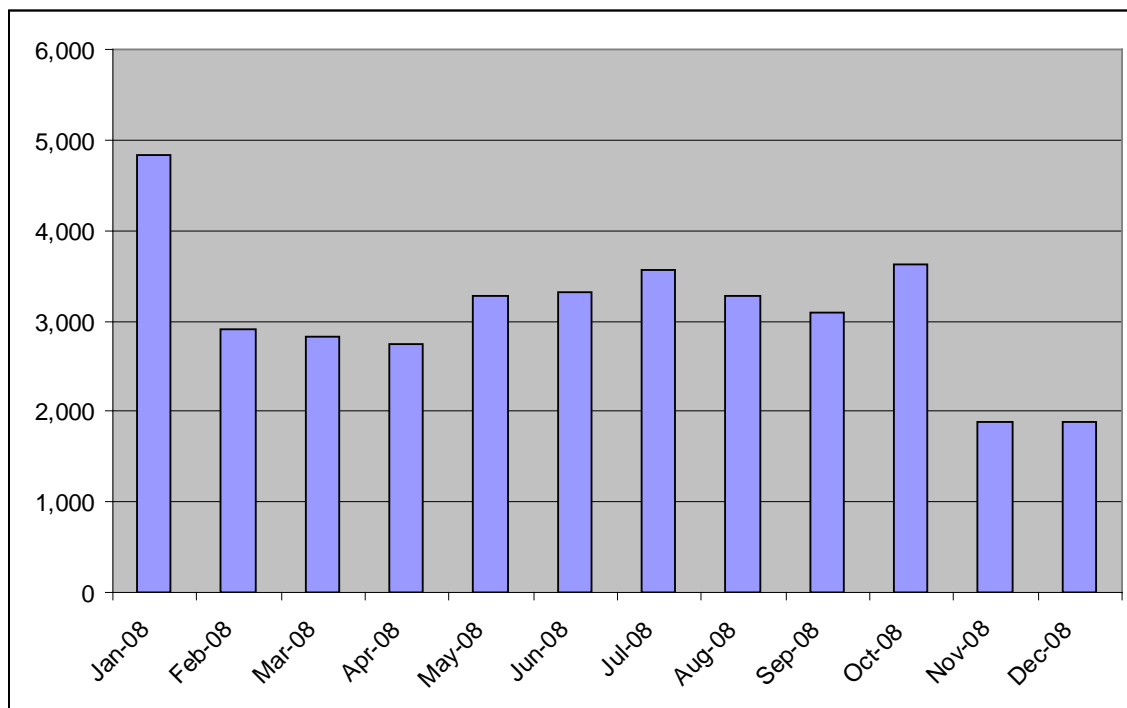
| | Page Name | Pageviews |
|----|---|------------------|
| 30 | Desktop Support http://inside-www.niehs.nih.gov/guide/desktop/home.htm | 1,084 |

DIR Intranet

inside-dir.niehs.nih.gov

Successful requests: 42,150
 Average successful requests per day: 115
 Successful requests for pages: 37,238
 Average successful requests for pages per day: 102

2008 Monthly Traffic



Top pages

| | Page Name | Pageviews |
|---|---|------------------|
| 1 | Sequencing Core Group http://inside-dir.niehs.nih.gov/dirlmc/seqcore.htm | 2,376 |
| 2 | NIEHS Forms http://inside-dir.niehs.nih.gov/FORMS/ | 1,074 |
| 3 | Animal Handling Forms | 1,057 |

| | Page Name | Pageviews |
|----|--|------------------|
| | http://inside-dir.niehs.nih.gov/FORMS/acuc/index.cfm and http://inside-dir.niehs.nih.gov/FORMS/acuc/ | 330 |
| 4 | Microarray Group http://inside-dir.niehs.nih.gov/microarray/ | 726 |
| 5 | Pathology Support Group http://inside-dir.niehs.nih.gov/dirlep/dirpsg/home.htm | 676 |
| 6 | Division of Intramural Research http://inside-dir.niehs.nih.gov/ | 623 |
| 7 | Veterinary Medicine Section SOPs http://inside-dir.niehs.nih.gov/dircmb/restrictacuc/soplink.htm | 437 |
| 8 | Animal Care and Use Handling Forms http://inside-dir.niehs.nih.gov/FORMS/acuc/index.cfm?router=acuc | 420 |
| 9 | Fluorescence Microscopy and Imaging Center http://inside-dir.niehs.nih.gov/fmic/home.htm | 358 |
| 10 | Animal Resources http://inside-dir.niehs.nih.gov/dircmb/animal.htm | 344 |
| 11 | Page Not Found http://inside-dir.niehs.nih.gov/microarray/collab.htm | 293 |
| 12 | Flow Cytometry Center http://inside-dir.niehs.nih.gov/fcc/ | 290 |
| 13 | NIEHS Histology Laboratory http://inside-dir.niehs.nih.gov/dirlep/histo.html | 283 |
| 14 | Animal Care and Use SOPs http://inside-dir.niehs.nih.gov/dircmb/restrictacuc/animalcare.htm | 268 |
| 15 | Comparative Medicine Branch http://inside-dir.niehs.nih.gov/dircmb/ | 243 |

Library intranet

inside-library.niehs.nih.gov/

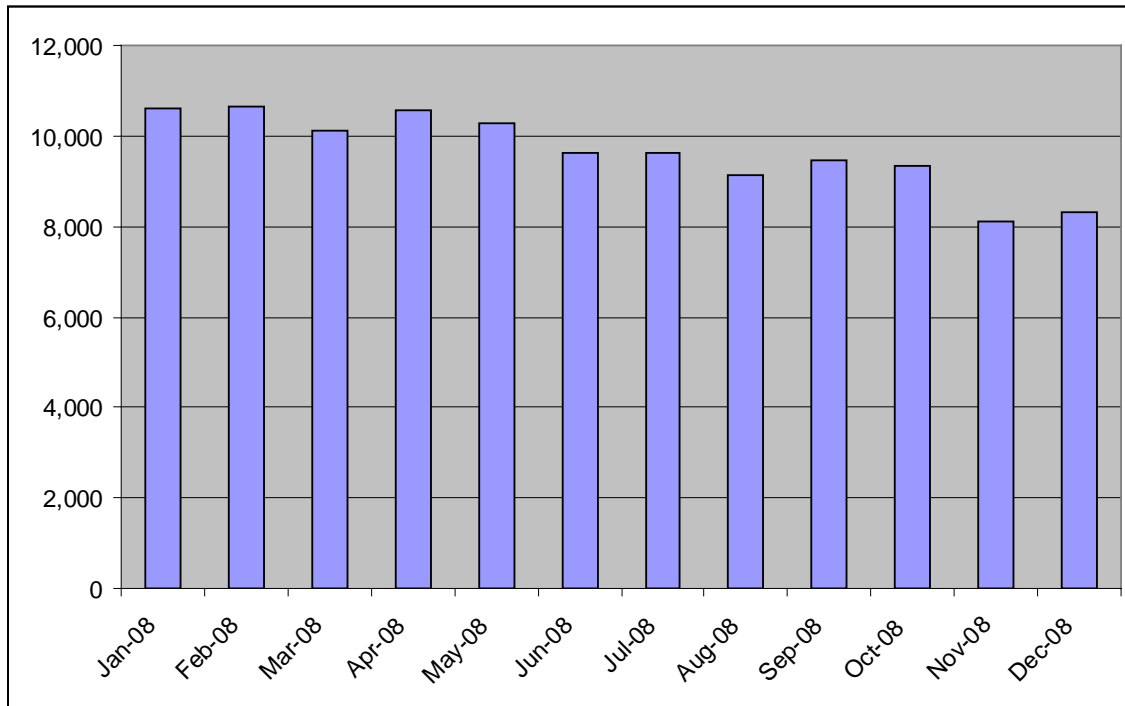
Successful requests: 123,506

Average successful requests per day: 337

Successful requests for pages: 115,835

Average successful requests for pages per day: 316

2008 Monthly Traffic



Top pages

| | Page Name | Pageviews |
|---|---|-----------|
| 1 | Library Homepage | 38,781 |
| | http://inside-library.niehs.nih.gov/ and http://inside-library.niehs.nih.gov/home.htm (/index.cfm) | 1,128 |
| 2 | Databases | 19,580 |
| | http://inside-library.niehs.nih.gov/database/ and http://inside-library.niehs.nih.gov/database/home.htm | 2,069 |
| 3 | Journals | 12,787 |
| | http://inside-library.niehs.nih.gov/journals/ and http://inside-library.niehs.nih.gov/journals/home.htm | 1,596 |

| | Page Name | Pageviews |
|-----------|--|------------------|
| 4 | Article and Book Requests http://inside-library.niehs.nih.gov/requests/ and http://inside-library.niehs.nih.gov/requests/home.htm | 1,297 317 |
| 5 | Published Literature Database Descriptions http://inside-library.niehs.nih.gov/database/publitinfo.htm | 364 |
| 6 | Research Links http://inside-library.niehs.nih.gov/research/home.htm and http://inside-library.niehs.nih.gov/research/ | 359 323 |
| 7 | About the Library http://inside-library.niehs.nih.gov/about/home.htm | 231 |
| 8 | Scientific Data Database Description http://inside-library.niehs.nih.gov/database/scidatainfo.htm | 216 |
| 9 | Environmental Health in the News http://inside-library.niehs.nih.gov/rss/news.cfm | 196 |
| 10 | Contact the Library http://inside-library.niehs.nih.gov/contact/lib_feedback.cfm | 179 |
| 11 | NIEHS publications http://inside-library.niehs.nih.gov/publications/ and http://inside-library.niehs.nih.gov/publications/home.htm | 137 115 |
| 12 | News sources http://inside-library.niehs.nih.gov/research/news/home.htm | 130 |
| 13 | Alphabetical List of Databases http://inside-library.niehs.nih.gov/database/alphalist.htm | 123 |
| 14 | Recent Publications by NIEHS Authors http://inside-library.niehs.nih.gov/whatsnew/2008/articles/bibJune08.html | 114 |
| 15 | What's New at the NIEHS Library http://inside-library.niehs.nih.gov/whatsnew/ | 106 |

11 APPENDIX G: USER PERSONAS AND AUDIENCE PROFILES

11.1 Introduction

Based on the research conducted during the assessment, SRA identified six key audience types within the NIEHS staff. SRA created profiles of each internal audience type, listed out their key goals or tasks on the intranet, and developed a sample user persona for each audience.

11.2 Purpose and Scope

The seven audience types within NIEHS staff are the Manager, the Lab Technician, the Bench Scientist, the Desktop Scientist, the Administrative staff, the Secretary, and the Trainee. Each audience has distinct characteristics, different goals and key tasks, and different needs from the NIEHS Intranet. For each audience type, SRA provides a profile of the audience, the tasks they are using the intranet to accomplish on a regular basis and a sample user persona for each audience type. A user persona is an archetypal representation of an actual group of users who share similar needs and goals. It is a tool that helps keep the user in mind through the design process.

While each of the audience types have different tasks that they use the Intranet to accomplish, there are shared tasks that every employee must perform such as:

- Find a phone number or contact information for another staff member;
- Request IT support;
- Make a facilities request (such as moving equipment or replacing light blub);
- Fill out timesheet (except for trainees);
- Register a visitor with security;
- Search for personnel issues related to position;
- Look at cafeteria menu;
- Post an item for sale in the Trading Post;
- Find current NIEHS or NIH policies and procedures;
- Share documents with others;
- Access shared documents;
- Locate trainings to take;
- Keep track of trainings taken; and
- Locate orientation material.

Since all audience types need to accomplish these tasks, these tasks are not listed under the individual profiles. However, they should be addressed when re-designing the NIEHS intranet.

PERSONAS

Audience Type: Manager

Justin M. Warford, Ph.D.

Principal Investigator

Has been at NIEHS for 15 years

"Really my secretary uses the Junction a lot more than I do. She knows where to find everything and has access to do everything for me."



Dr. Warford is a scientist who has been at the NIEHS for 15 years. For the past few years, he has been the Principal Investigator on a study looking at antioxidants and PCB exposure. He has a medium size lab with two staff scientists, a lab tech, and two trainees. He participates in a journal club and likes to take runs around the lake when not tending to his research. He provides career advice and guidance to his trainees and staff scientists because he remembers how confused he was in the early years of his career. Dr. Warford is fairly well known around the Institute because he is approachable, outspoken, and presents on his research occasionally. While he is pretty self-sufficient, Dr. Warford relies on his secretary to do the administrative tasks that he does infrequently, such as make travel arrangements and get reimbursements for things he purchased out of pocket.

Audience Profile:

Managers are a sub-type of the scientist or admin audiences. In addition to the roles they play as a scientist or administrative staff person at the NIEHS, a manager is also responsible for the supervision of staff. Managers spend most of their time in front of a computer or working with the people they supervise or mentor, possibly in staff meetings or one-on-one meetings. Managers generally rely on their secretaries for a lot of the day-to-day administrative tasks, but still have some direct duties such as signing off on timesheets for the people they supervise.

Key Tasks / Goals on the Intranet:

- Signing off on timesheets
- Finding general information about the NIEHS to share with guests
- Finding out what events are happening around the Institute to attend personally or share with mentees
- Reading about NIEHS in the news
- Keeping up to date with policies and procedures
- Access files from home

Audience Type: Lab Technician

Jing Li

Lab Technician

Has been at NIEHS for 5 years

"If I'm at my desk for 30 minutes a day, that's too much!"

Jing has been a lab tech for 5 years. He received his undergraduate degree in biology and always enjoyed working in a lab, but he has no interest in getting a Ph.D. or furthering his education. Jing came from China to work at the NIEHS on a H1-B visa and he has many different guidelines to follow as a visa recipient. Jing's spoken English is not perfect, but he can read and write English fluently, though sometimes he gets confused by all the acronyms that the government uses. He has a pretty demanding schedule in the lab, so he tries to spend most of his day there rather than at his desktop computer. Recently Jing was looking on the Junction for some information on performance plans and was frustrated because it took too long to find the information and he had to stay late to finish a few experiments. He expects that most, if not all, important information will be emailed to him, so he never looks for any NIEHS information unless he has an urgent need.



Audience Profile:

Lab techs spend most of their time in the lab doing experiments in support of the lab's work. Lab techs sometimes have responsibilities for the maintenance of the instruments within their labs and some administrative duties such as ordering supplies and media. Especially if they are in wet labs, a lab techs' time in front of a computer is extremely limited. A lab tech is a permanent position within the NIEHS.

Key Tasks / Goals on the Intranet:

- Looks for experiment protocols
- Order supplies and media
- Looks for journal articles
- Find things quickly and easily to keep time away from lab at minimum.
- Schedule pickup of hazardous material
- Schedule time with a shared piece of equipment
- Find out about core laboratory services

Audience Type: Scientist

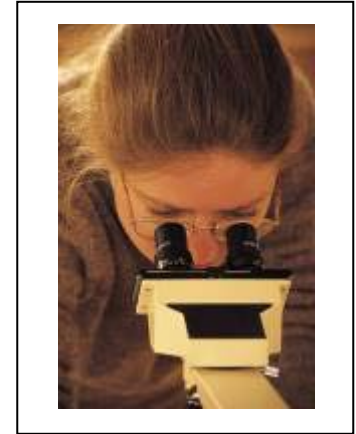
Maria Walters, Ph.D.

Staff Scientist - Biologist

Has been at NIEHS for 1 ½ years

"I wish there was one place for me to go to find out all I need to know about working here."

Dr. Walters has been at the NIEHS for 1 ½ years working as a biologist in a lab. She spends some time at the computer looking for new research articles that are relevant to her research and some of her time at the bench doing experiments. Maria has a number of hobbies that she focuses on after work and thinks of her work at NIEHS as just one of the many things that make up her life. She has a number of friends around the Institute and socializes with them at lunch and at NIEHS staff events.



Since Maria has been working in the same lab since she arrived at NIEHS, the article searches she does use the same keywords every time. She has heard about setting up custom feeds for articles that match her keywords, but no one in her lab does this and she has not had time to look for the information herself. Even though she has been at the Institute for more than 1 year, there are still things she is finding out about, for instance, she did not know that there were trainings offered by NIEHS and by NIH. Maria wishes that there was one place she could go to find out everything she needed to know.

Audience Profile:

Scientists make up the largest audience type at the NIEHS. Scientists work in individual labs conducting research under the direction of the Principle Investigator. Scientists working in core labs serve as a centralized resource by conducting research for other labs. Scientists have Ph.D.s or other doctorate-level educations. They can be tenured or non-tenured in their NIEHS careers. Scientists spend about half their time on the computer and half their time at the bench, unless they work in a dry lab doing computer-based research. They are expected to keep up on the latest research in their field, especially if it is directly related to the research they are doing. Scientists' hours vary based on what experiments are underway. In addition, they might do work from home to prepare for experiments. Scientists will generally know the people who are in their labs or who do similar research across the Institute, but mostly stay to themselves and focus on their research. For the most part, scientists have spent their careers in labs in and out of the university setting and are more familiar with how these places work than with how "offices" work. Depending on the size of the lab, a scientist might do some or no administrative work.

Key Tasks / Goals on the Intranet:

- Search for personnel issues related to position
- Looks for experiment protocols for reference
- Order supplies and media
- Schedule time with a shared piece of equipment
- Schedule pickup of hazardous material
- Find interesting meetings / events to attend
- Look for journal articles
- Manage articles and research
- Keep up with latest research in field
- Find out what is going on in other labs
- Access files and other NIEHS systems from home
- Track a manuscript that is being readied for publication in a journal
- Find out about core laboratory services

Audience Type: Administrative staff

Robert T. Bieker
Contract Specialist
Has been at NIEHS for 26 years

"I pretty much know everyone and everyone knows me. If I need something, I just pick up the phone."



Robert has been at NIEHS for 26 years managing contracts with outside researchers who conduct work for NIEHS. He has a degree in finance, but has been around NIEHS for long enough that he understands enough to make sense of what the scientists are talking about. He is interested in retiring soon and wants to know more about what he has to do to make sure he is on track.

Audience Profile:

Administrative employees are non-scientist employees that work in support offices across the Institute such as Health & Safety, IT, Communications, Proposals, Finance etc. They spend most of their time behind their computers. Since they serve in supportive roles, administrative staff spend a good amount of time keeping track of the requests made of them. Administrative employees work regular business hours and sometimes need to access files from home.

Key Tasks / Goals on the Intranet:

- Update their information on the intranet pages they maintain
- Fill out forms
- Find out latest policies or guidance from NIH/HHS
- Reserve a conference room
- See what events are coming up that might be interesting to attend
- Make credit card purchases
- Access files from home

Audience Type: Secretary

Vanessa D. Patterson

Lab Secretary

Has been at NIEHS for 5 years

"I do everything around here except for experiments! Just leave it to me and I'll take care of it."



Vanessa has been at the NIEHS for 5 years. She supports all the scientists in her lab by ordering office supplies, keeping them up-to-date on new policies and procedures, doing travel arrangements and expense reports, and doing anything else administratively that needs working on. She spends a lot of time answering emails and following up on requests made of her. She is authorized to make purchases using the credit card and goes to NIH for periodic trainings to keep this authorization.

Audience Profile:

Secretaries are the "go-to people" in whatever office they support. They could work in administrative office or in labs, but in whichever capacity, secretaries provide centralized administrative support and serve as an overall resource for NIEHS policies and procedures to the offices in which they work. In many cases, they serve as intermediaries between their offices and administrative offices across the NIEHS and NIH. Many secretaries make all the credit card purchases for their offices, and file all the travel requests and other forms.

Goals on the Intranet:

- Access the latest forms
- Find specific details on policies and procedures
- Make conference room reservations
- Make credit card purchases
- Order supplies

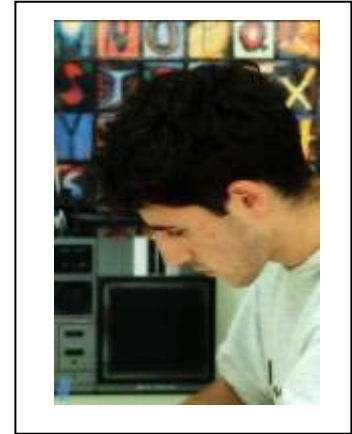
Audience Type: Trainee/Fellow

Gergo Meier, Ph.D.

Fellow

Has been at NIEHS for 3 years

"I've never been to the cafeteria. It's all the way at the other side of the building and it's really far for me to walk. Generally I just bring my lunch and eat it in the hallway while talking to the other people in my lab."



Story: Gergo has been a fellow at the NIEHS for 3 years. He is an active participant in the NTA and is friendly with a lot of the other trainees across the Institute. There are a couple of new trainees in his lab and Gergo is trying to get them more involved in what the NTA is doing. Gergo is starting to think about what he is going to do after his fellowship is up, and would like help preparing for his career. He is also interested in exploring career opportunities at NIEHS, and has started paying more attention to the seminars that are offered by the Career Development office.

Audience Profile:

Trainees are very similar to scientists in the type of work that they do at the NIEHS, however, trainees are not permanent employees and for the most part only work at NIEHS for up to 5 years. A trainee can be a fellow, a post-doc, a grad student, a step student (high schooler), a Summer of Discovery participant, or a post-baccalaureate student. Since trainees are not permanent employees, the conditions of their employment are different than permanent employees, e.g., they do not have to fill out timesheets, NIEHS supports their search for jobs after they leave the Institute, etc. Trainees have more resources dedicated to them than other types of employees. There is a Trainees Association (NTA) and an Office of Fellows' Career Development (OFCD), that both support trainees, holding seminars and providing other types of support. Similar to the scientists, the trainees are used to the research/ university environment where they are expected to focus on their research and expect that administratively important information will be conveyed to them by email or direct contact. The trainees will associate with other people in their labs ("departments") and other trainees ("students") and rely on their bosses and their labs' secretaries if they have any questions that their peers cannot answer.

Key Tasks / Goals on the Intranet are the same as for Scientists,

- Search for personnel issues related to position
- Looks for experiment protocols for reference
- Order supplies and media
- Schedule time with a shared piece of equipment
- Schedule pickup of hazardous material
- Find interesting meetings / events to attend
- Look for journal articles
- Manage articles and research
- Keep up with latest research in field
- Find out what is going on in other labs
- Access files and other NIEHS systems from home
- Track a manuscript that is being readied for publication in a journal
- Find out about core laboratory services

except for the following:

- Look for jobs for when stint at NIEHS is over
- Find out about trainee-specific events or seminars
- Orient themselves with NIEHS

Audience Type: Desk Scientist

Melanie Gutkowski, Ph.D.

Desk Scientist

Has been at NIEHS for 2 years

"I do most of my work from my desk, so I really rely on easy access to online resources."



Story: Melanie manages a number of contracts with outside labs. A scientist herself, she analyzes data from experiments done by outside contractors, synthesizes it, and writes reports for outside publication. She is constantly exchanging documents and she needs easy and efficient ways to share large files. Melanie is sometimes frustrated with the difficulty of exchanging large files with outside contractors.

Audience Profile:

Scientists as a whole make up the largest audience type at the NIEHS. Desk scientists have Ph.D.s or other doctorate-level educations, but do not work in the wet labs. Some desk scientists at NIEHS manage the work of outside labs that are contracted to perform experiments. Other desk scientists perform their own research but on the computer with data modeling and statistical analysis rather than with test tubes and microscopes.

Key Tasks / Goals on the Intranet:

- Access files from home
- Manage and share large sets of data
- Communicate and share data with non-NIEHS researchers
- Looks for experiment protocols for reference
- Find interesting meetings / events to attend
- Look for journal articles
- Manage articles and research
- Access files and other NIEHS systems from home
- Track a manuscript that is being readied for publication in a journal
- Search for personnel issues related to position

12 APPENDIX H: NIEHS INTRANET REDESIGN ACTION PLAN

#1 Do this first - Quick wins

To keep up the momentum created by the assessment, NIEHS should first tackle small projects that can be completed quickly and successfully. The following are tasks that require low effort, but should result in large impact

- Left align the links in the left-hand navigation on the Junction homepage.
- Establish naming conventions and write clear labels. Spell out all acronyms and rename links that are labeled ambiguously.
- Create a central area for all training information.
- Create a central area for all fellows / trainees information
- Streamline the forms area. Rename ambiguously named links and group all like forms together.

#2 Do this next – Review the most used and useful sections of the intranet

A content inventory of the entire NIEHS intranet should be created to identify and review all pages to determine if content is relevant, current, and not duplicative of content that exists elsewhere. However, we recommend that NIEHS use the following tables in Figures 2-1 and 2-2 to prioritize the order which pages or sections of the site are reviewed. (Most top pages are also included the top sections.)

Using the survey results in conjunction with the web statistics, contextual inquires and needs-gathering meetings, the sections and pages in Figures 2-1 and 2-2 rose to the top as most used and most useful pages for NIEHS staff in general. Though some of these pages and sections of the intranet are used by only certain segments of the NIEHS staff, they are widely used enough to need to be prioritized with the pages and sections that are used by staff overall. (Pages marked with an asterisk (*) are used by all NIEHS staff)

| Rank | Top section / home pages |
|------|-----------------------------------|
| 1 | Junction Homepage* |
| 2 | Library Homepage* |
| 3 | Administrative Resources* |
| 4 | Human Resources / EEO* |
| 5 | Health and Safety Branch Homepage |
| 6 | Scientific Resources |
| 7 | Computing Guide* |
| 8 | About NIEHS, NTP and RTP* |
| 9 | Databases |

Figure 2-1: Top sections of intranet

| Rank | Top pages (excluding sections / homepages) |
|------|--|
| 1 | Cafeteria Menu* |
| 2 | Journals |
| 3 | Core Laboratories |
| 4 | Benefits and Payroll* |
| 5 | Forms* |
| 6 | Master Calendar* |
| 7 | Facilities* |
| 8 | ITAS / My Pay* |
| 9 | MOATS |
| 10 | NIEHS Cares Web* |
| 11 | People Locator* |
| 12 | Supplies |
| 13 | Visitor Registration* |

Figure 2-2: Top pages on intranet

For each of the sections we recommend that NIEHS:

1. Inventory all pages within the sections
2. Identify the owner of each page or piece of content within section. This is the person who will be responsible for the ongoing maintenance of the page. Ideally, the content owner should be a person with subject matter expertise in the section that he/she is responsible for.
3. Review these pages to determine which content is current, which needs to be revised and/or updated, and which can be deleted. For pages that **will not be deleted**, note places where
 - a. Labels can be clarified
 - b. Acronyms can be spelled out
 - c. Files are available in old file formats
 - d. Context can be added to links that go to non-NIEHS pages
 - e. Color is used to convey information (508 violation)
 - f. Document titles need to be added (508 violation)
 - g. Alt text needs to be added to images (508 violation)
4. Pages that can be deleted from the intranet included areas where the content is no longer being maintained, is no longer needed, or is a duplication of material that originates elsewhere.

#3 In the meantime...

- After above sections have been inventoried and reviewed, the remaining pages on the intranet should be reviewed and inventoried as well using the above criteria.
- While the inventory is underway and unneeded pages are being deleted, an information architecture can be set up that reflects the staff's needs from the information that NIEHS provides. Possible organization schemas include:
 - By Subject
 - scientific-related resources
 - administrative / support
 - personal / community / organizational (work/life)
 - By Task / Goal
 - By Audience (based on personas)
 - By Time/Location