# **National Institutes of Health Center for Scientific Review**



## **CSR Web Needs Assessment**

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## 1 Introduction

## **Background**

CSR maintains both an internet and an intranet presence that comprise the CSR webspace. The sites provide information in support of the receipt, referral, and review of grant applications. This webspace is intended to serve multiple audiences and provide content that is changing, rather than static. CSR has initiated a redesign of the webspace in order to improve the support the webspace provides to the fair, impartial, and informed processing of grant applications. CSR must be prepared to anticipate changing user needs and leverage emerging technology in the accomplishment of its mission. The desired outcomes of the overall redesign effort are to:

- increase awareness in CSR's role in the US scientific research enterprise;
- "fix" the strategic value of CSR in the NIH extramural research community;
- increase accessibility to CSR information;
- increase usage of CSR information;
- improve quality of CSR information;
- exert a positive impact on peer review processes and outcomes;
- exert a positive impact on individual grant applications;
- reduce the digital divide among ethnic, cultural, and geographic groups of scientists;
- encourage innovation in next generation Internet/intranet development; and,
- harness appropriate EIT tools to enable CSR staff to do their jobs faster, more efficiently, and more effectively.

The redesign strategy begins with the evaluation of the existing sites, using heuristic evaluation methods and user surveys as inspection methods. This approach allows the CSR team to incorporate feedback during several stages of the redesign, and employs generally accepted means of conducting cost-effective usability engineering. This report is intended to provide the results of the initial evaluation and recommend the next steps in the technical design and development of a webspace that can anticipate the evolving requirements of the NIH grant applications community and easily adapt to their needs. Additional usability engineering (through any inspection methods) can be used to fine tune subsequent site designs.

## **Objectives**

This phase of the CSR webspace redesign effort has focused on the achievement of the following technical objectives, as stated in the March 19, 2001 Statement of Work.

- To examine current CSR Website design and any proposed changes with a view to better facilitate communication, the flow of information, and, as appropriate, workgroup processes between and among CSR and NIH staff.
- To examine current CSR Website design and any proposed changes with a view to better facilitate communication and CSR information access by grant applicants and business offices at grantee institutions.
- To develop recommendations for a redesign of CSR's Internet and intranet sites that
  promotes the enhanced productivity of CSR Web development teams with an integrated
  security solution and connections to NIH legacy and prospective systems and
  technologies.

## **CSR Webspace**

In evaluating a website, it is important to understand the purpose of the site and define the intended audience or user group. To ensure complete coverage of the webspace, hierarchical site maps were created for both the internet and intranet sites. The maps shown here depict the main areas and the first level of subjects for each. The full maps are contained in Appendix B as the first column of the Usability Problem Tables.

#### Internet

The internet serves CSR personnel, NIH program and grants administrative staff, the US scientific research community, and also the general public. The site provides information to the external community and assists the accomplishment of CSR review and referral of grant applications.

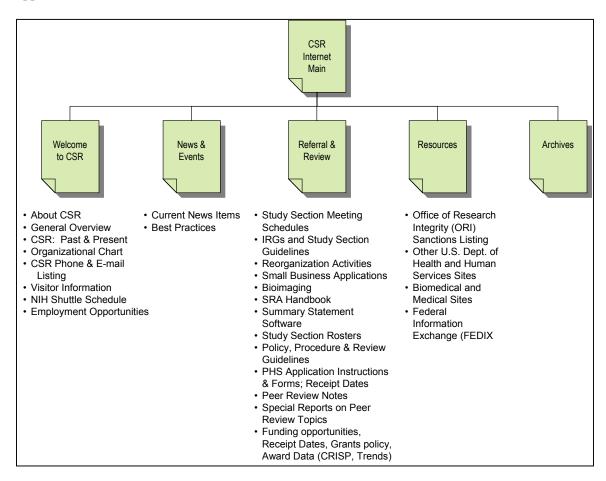


Figure 1 CSR Internet Map

#### Intranet

The CSR intranet is more like an extranet, since it is available to not only CSR personnel, but also to other NIH staff members. Users must be within the NIH network in order to access the site. The intranet's current set of intellectual assets consists mostly of a collection of documents

originally hosted on the shared network drive. The intranet supports the core processes as well as support functions such as human resources, financial management, and committee management.

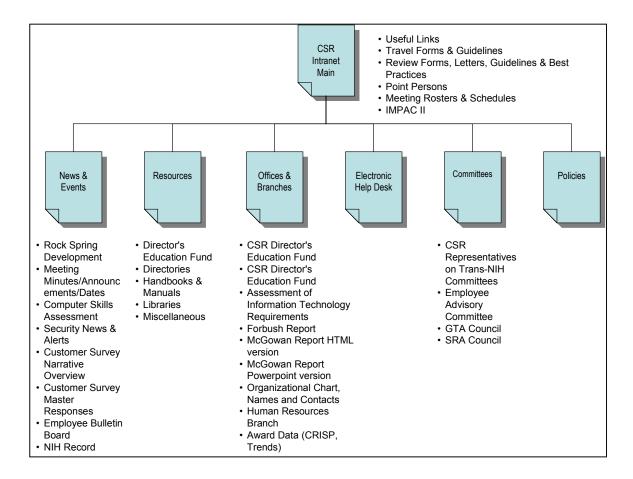


Figure 2 CSR Intranet Map

## 2 Methods

The usefulness of a web site can be determined by examining two components – *utility* and *usability*. First, the site has to do something people care about. It has to meet the objectives intended for that site. The *utility* of the site is a measure of whether the site provides information or assists in the accomplishment of tasks that are of interest to the user. Second, the user has to be able to use the site effectively. The *usability* of the site is a measure of whether the user can figure out how to accomplish tasks and obtain the desired information. A combination of methods has been used to assess both the utility and usability of the CSR webspace. Heuristic evaluation, focus groups, and user surveys have been used to assess utility, evaluate usability, and collect users' requests and recommendations.

### **Heuristic Evaluation**

In a heuristic evaluation, usability specialists examine aspects of an interface to determine whether they conform to a list of established usability principles, referred to as the heuristics. An

evaluation is typically conducted using a small set of evaluators, generally between 3 and 5. A heuristic evaluation consists of identifying the heuristics, getting usability opinions, merging the problems identified, and forming the recommendations for resolution of those problems..

Jakob Nielsen, a recognized expert in usability engineering, compiled a list of ten recommended heuristics by analyzing more than 200 usability problems and statistically reducing them. The results are the 10 most important rules of usability. These heuristics are widely accepted throughout the usability engineering community and, more specifically, those experts specializing in web usability. They have been adopted for the purposes of this evaluation. For some of the heuristics, Nielsen's descriptions are followed by CSR-specific notes or further explanations, which are shown in italics.

1. **Visibility of system status** - The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.

The user should see clear indications of where they are within the site, and be easily able to tell where they can go from that point.

2. **Match between system and the real world** - The system should speak the users' language, with "plain English" words, phrases and concepts familiar to the user, rather than system-oriented terms. Information should also appear in a natural and logical order.

The terminology should be consistent with the user community and consistent across the site. The way information is grouped should be intuitive and natural.

3. **User control and freedom** - Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Support undo and redo.

Values for user-controlled browser settings should not be forced. Each page should have a "home" button. Browser-provided navigation tools such as "Back" should not be disabled.

4. **Consistency and standards** - Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform conventions.

The name of a link should match the title of the page it leads to. The pages within one site should have the same look and feel. Means of navigation should be consistent on each page.

5. **Error prevention** - Even better than good error messages is a careful design which prevents a problem from occurring in the first place.

Forms should do some error checking prior to submission, and fields should be clearly labeled. Search criteria for retrieving schedules should be intuitive and clearly labeled.

6. **Recognition rather than recall** - Make objects, actions, and options visible. The user should not have to remember information and/or data from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.

The site should have good labels and descriptive links. The data architecture should be intuitive.

7. **Flexibility and efficiency of use** - Accelerators -- unseen by the novice user -- may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.

Bookmarking commonly used sections should not be unnecessarily impeded by temporary URLs or frames. Supports Section 508 of the Rehabilitation Act.

- 8. **Aesthetic and minimalist design** Dialogues should not contain gratuitous verbiage or information that is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.
- 9. **Help users recognize, diagnose, and recover from errors** Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.
- 10. **Help and documentation** Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.

Help should be integrated into the design of the page, for example links to help on specific topics, mouse-over descriptions, etc.

### **Focus Groups**

A focus group is an informal technique used to assess the user population's needs and feelings about site design. Focus groups collect opinions on both utility and usability. The group is lead by a moderator and generally lasts one to two hours. CSR conducted two focus groups, in which participants were allowed ample time to explore the webspace individually. The moderator observed individual interaction with the websites and took notes. Meeting notes from a web opportunities meeting with the DMS management were considered as an additional set of focus group results.

## **User Group Surveys**

User group surveys were constructed from general website usability checklists and modified to include questions specific to the CSR webspace. These questions were grouped into general categories. Space was provided to allow users to provide comments. Surveys were conducted using a sample from both user communities. Most questions called for yes or no answers. Time to complete a survey was estimated to be about 10 minutes.

In addition to their group participation, focus group participants were asked to also fill in a survey about the web site. Not all focus group participants submitted their completed surveys. The surveys for the internet site were then sent to a group of 11 external users identified by the SRAs. Of the 11, only 4 responded. This was an acceptable response set for the purposes of the evaluation, since 3 to 5 evaluators are ideal to obtain valid results. Statistically, the user group *least* likely to respond to surveys is the group that has a middle level of satisfaction with their experiences in using the web site. Survey respondents are more likely to be either highly unsatisfied or highly satisfied, thus having more of a motivation to participate in the survey and have their opinions heard. A lack of response from both groups can be seen as an indicator of mid-level general user satisfaction with the internet web site.

Survey responses were tallied, and write-in comments were added to the list of usability problems. The survey responses were then used in conjunction with other results to create redesign recommendations. It should be noted that a yes or no answer given for a question that called for a specific answer was regarded as a non-response. The survey response tables with totals are included in Appendix A.

## 3 Results

The usability problems for each site are summarized by the type of heuristic it violates. Inconsistencies that were common were summarized at the major heading level, rather than repeated for specific pages. Problems designated as utility problems were identified by users through either focus groups or through narrative comments provided as part of the survey responses. These issues and recommendations depict problems with the content, as well as other subjective flaws.

The full tables of usability problems for each site are contained in Appendix B. The table lists a specific heuristic for each problem identified and lists each problem by page, following the site maps.

## **Internet Usability Summary**

The internet site has some general usability errors that can be considered minor and easily fixed. The overall design is clean, but does not leverage use of accelerators such as a persistent navigation tool. The design features a header that includes the logo and identifies the location within the site and date of last update. This layout is not consistently applied to all pages.

One of the most pervasive usability issues present throughout the site is the presence of lengthy text that has not been optimized for web viewing. One of the primary rules for web usability is to keep text brief and chunked into meaningful blocks. Examples of this include the peer review process, and the study section guidelines. In contrast, the page depicting How to Apply for a Federal Job is grouped into small paragraphs with clear headings.

## **Intranet Usability Summary**

The intranet has a less consistent format and design. There are several places within the site that have a different enough look and feel that they appear to be separate sites. The site contains numerous links to files of different formats (such as Word, PowerPoint, and PDF documents) that are not labeled to let the user know that a plug-in or other application will be required. Some links do warn of a different file type, which lets users choose whether or not to launch an additional application.

The intranet site has more pages to it, and some links appear in more than one place. As is common with sites of this size, some of the links are either invalid or point to a site that redirects (most redirects expire eventually, resulting in an invalid link). There is at least one case of two nearly identical pages (The CSR Director's Education Fund Instructions page found under Offices & Branches, which is different from the page found under Resources). Most likely one was intended to replace the other.

## 4 Redesign Recommendations

The results of the heuristic evaluation, focus groups, and surveys were all considered in forming recommendations. Since the CSR web team has continued to improve the webspace, some recommendations may have already been implemented during the course of this project.

#### **Internet Recommendations**

#### **Architecture**

The architecture should be structured to better group information together in a manner that is logical and intuitive. For example, users thought that the Study Section Roster should also contain the Small Business Innovation Research Roster, or should at least link to it. The structure should be organized to minimize repeated links to reduce both the potential for errors and effort of maintenance.

Invalid links must be updated or removed. Some links lead to a site that redirects to another URL. This is undesirable, since redirects often expire after some period of time, and since it interferes with the user's ability to use the browser's back button. An automated tool (such as LinkAlarm, ServerEye, or NetMechanic) can be used to periodically check for expired links and new redirects.

Personalized pages can be used to allow users to set up the features they use most frequently as their defaults for the site (e.g., my.yahoo.com). Such a feature can be implemented through the use of a web portal.

#### Interface

The navigation of the site should be improved. Simple enhancements to navigation can be easily implemented. A site map should be created that shows the user what content is available across the site. A search box is an essential feature, and should be accessible from every page.

The current navigation bar feature is helpful, but should be implemented more consistently. The navigation bar goes to different levels for each section. Most of the site's navigation bars only indicate the highest section, e.g., Referral & Review. But within some of the lower pages, the navigation bar reflects that pages title and not the parent page within that section hierarchy, e.g. the About CSR page navigation bar contains "About the Center for Scientific Review" without referencing the referring section, Welcome. This consistency will be made more manageable by implementing an architecture which minimizes redundant links (see above). Additionally, the navigation bar sections should all be linked, allowing the user to go back to specific sections of the hierarchy. The navigation bar feature could be replaced with a navigation panel, typically placed on the left side of each web page. A useful navigation panel allows users to see where they are within the hierarchy, and move immediately to a peer section or to other sections.

The overall appearance of the site can be improved with the use of appropriate graphics. The file size of graphics should be small to reduce page load times. Judicious use of color could also give the site a more current, up-to-date look. The "look and feel" of the site is fairly consistent. This is important, as it helps users easily recognize that they are navigating through pages of one web site. The consistency also helps users anticipate where to look on each page for different features. Some pages have navigational aids across the bottom, some do not. Some pages had a sudden departure from the layout persistent throughout the rest of the site, for example the Policy on Amended Neuroscience Grant Applications page or the page for Working Group on Review of Bioengineering and Technology and Instrumentation Development Research (May 1999, Final Report).

Accessibility of the site could be improved. All images should have good descriptions in the alt tag. There should be an alternative means of viewing the organization charts, such as a text listing that could be read by accessibility tools.

Links to documents of other files types, such as PDFs, should be clearly labeled as such. The user should have ample warning that clicking on a link requires a plug-in or will launch another application. Users logged in through slow connections may wish to download such files rather than open them from the plug-in.

#### Content

There were no specific requests to add content to the internet site that is not already available. Most comments on the content were more architectural in nature than content specific. One user did comment that the schedules are not easy use, and that new users find them confusing.

One major issue with content on the internet site is the presentation of lengthy text. Nearly all documents originally created for paper presentation must be restructured to be readable by web standards. The average internet user does not read all of the text within a page. Users tend to "scan" pages, reading the headings, highlighted keywords, and some text under the headings that interest them most. The rule for web reading is to present one idea per paragraph, and should not scroll more than two pages. The web is simply not a good forum for the presentation of lengthy documents. One alternative is to present the document in multiple hyperlinked sections. A good example of this is the SRA Handbook. Another method is to present the documents in another format such as PDF, which users can print and read. Some concepts can be explained at a higher, less detailed level in short paragraphs, with the entire text available in a PDF file.

Users commented that the list of Study Sections is too long, and should be broken into meaningful groups. The table could be broken into multiple pages, each containing one group.

#### **Intranet Recommendations**

#### **Architecture**

The architecture of the intranet is less structured. As is common with many intranets, the CSR intranet content was migrated over from shared drives, and its structure shows its roots. The architecture here should be redesigned completely, moving from the shared drive, document-centric structure to a task-focused or process oriented structure. The structure of the intranet should reflect the way CSR employees do their jobs. This is not a small task to undertake. The information architecture is the single biggest point of failure in any intranet. The development of the architecture might be influenced by design elements, such as the selection of a portal tool. Therefore, such determinations should be made before proceeding with an architectural redesign.

The intranet site contains more invalid links and redirects than the internet site. CSR should select a link-checking tool that can be installed inside CSR's firewall, rather than a service or tool hosted at another site that would only be capable of checking the internet site. Redundant links should be minimized. Some pages appear to contain nearly identical information, which is probably a migration issue. The most serious example is two pages containing CSR policy statements, one accessible from the SRA Council section, the other from HR – Policy. The pages have slightly different information.

Personalized pages such as those provided through the use of portal software would have a greater impact for the CSR employees. Some portal software permits options to be set at multiple levels, e.g. departments could tailor the "front page" for their employees, and employees could create their own personal CSR homepage from those options. Implementation of these features should be done in conjunction with structuring a process-oriented architecture to ensure that the intranet can support the jobs of all CSR employees.

#### Interface

The intranet site contains a huge amount of information, and needs to be reorganized as discussed above. Other simple enhancements should be added, such as a site map and a search box accessible from every page.

The overall appearance of the site is out-of-date. The "look and feel" of the site is somewhat inconsistent, with many pages not having the CSR logo or header information. Some major sections, such as SRA Council area, appear to be a different site altogether. The Extramural Staff Training and Development area is within the SRA Council area, and yet it has a completely different look and feel from both the SRA Council and the rest of the intranet site.

The navigation bar feature is again implemented consistently. The use of a linked navigation bar or navigation panel, site map, and access to a search feature would greatly improve the site's usability.

There are many links to documents of other files types, including PDFs, Word documents, and PowerPoint documents. Some are labeled as such, but most are not. Users should not be surprised by links. Each should clearly warn users that clicking on the link will launch a plug-in or another application. One link launches Outlook, which can be very slow to load.

#### Content

The intranet site contains many lengthy text pages. As discussed in the internet recommendations, these text pages should be converted to hyperlinked sections or presented as printer friendly PDF files. Specific guidelines for the creation of intranet and internet content, including restriction of lengthy passages, should be developed and enforced.

Some links do not fit with the subject of the rest of the page, for example the CSR Fax Cover Sheet is found under IT Security, and does not appear as a link from any other section.

Users and management requested specific content to be added to the intranet, listed here by branch:

#### **Human Resources**

- Salary charts from OPM for each type (regular, special rates, SES)
- Health and life insurance issues, including a summary or synopsis
- Link to OPM life insurance page
- Retirement FAQ
- Building floorplans
- People search feature
- Staff pictures and profiles

#### Financial Management

- CAN Code Structure
- Object Class information
- Forms, such as Payroll and Gift
- Budget justification

#### **Administrative Services**

- Show Administrative team organization, so people know their admin contacts
- Administrative FAQ
- Updated Service Guide

- Property pass creation and distribution for speakerphone requests, and for equipment requests, showing availability.
- Interactive electronic forms for Supply Order, Purchase Request, and Travel
- Leave Policy
- Calendar for CSR, including end-of-year procurement deadlines, grant application receipt dates, and nomination package due dates.

#### **Committee Management**

- Create a section for Committee Management.
- Show the Slate Representative for each Division. Each committee management staff has specific CSR organizations they support.
- Include deadline dates for committee management actions by the divisions.

## **Appendix A - Survey Questionnaire Results**

## **Internet Survey**

	"Yes"	"No"	No Response
Site Design			
Content is useful, relevant to the audience.	18	1	
Content "fixes" CSR's strategic value to the US scientific research community.	15	2	2
Site design reflects CSR's mission.	18		1
Information is organized in a manner that makes sense to the users.	14	3	2
Information is chunked into meaningful units.	13	3	1
Are the basic steps to achieve the user's goal clear from the start?	14	1	4
Does the internet/intranet site help you to perform your job?	15	4	
What percentage of your tasks at CSR are enabled by this site?	Average	10-15%	4
Navigation			
Matches the way users will want to work or complete a task.	15	4	
Are there overlapping/confusing thematic areas?	6	12	1
Content is successfully prioritized to boldly promote the site's most exciting content with size, color, and/or screen position?	16	2	1
Page Design			
Does the homepage design clearly communicate the site's core activities?	18	1	
Do the terms (especially the site's section headers and page names) adequately communicate the consequences of selection or action?	14	5	
Uses sufficient white space.	18	1	
Writing is grammatically correct and is short and concise.	18		1
Graphics			

#### **CSR Web Needs Assessment**

Uses graphics judiciously to enhance viewer interest.	12	6	1
Do graphics convey CSR's mission?	11	7	1
Can you locate these items?			
Disclaimer statement	18		1
Section 508/access policy statement	19		
Information contact for page content	19		
Contact for technical problems	17	1	1
Pick a roster to find for Council Round October 2001	19		
Search feature	18	1	
An online request for information form or "shopping basket"	7	9	3

12

## **Intranet Survey**

	"Yes"	"No"	No Response
Site Design			
Content is useful, relevant to the audience.	13		
Content "fixes" CSR's strategic value to the US scientific research community.	10	3	
Site design reflects CSR's mission.	10	3	
Information is organized in a manner that makes sense to the users.	13		
Information is chunked into meaningful units.	13		
Are the basic steps to achieve the user's goal clear from the start?	11		2
Does the internet/intranet site help you to perform your job at CSR?	12	1	
What percentage of your tasks at CSR are enabled by this site?	Averaş	ge 23%	3
Navigation			
Matches the way users will want to work or complete a task.	12	1	
Are there overlapping/confusing thematic areas?	3	10	
Content is successfully prioritized to boldly promote the site's most exciting content with size, color, and/or screen position?	11	1	1
Page Design			
Does the homepage design clearly communicate the site's core activities?	12	1	
Do the terms (especially the site's section headers and page names) adequately communicate the consequences of selection or action?	12	1	
Uses sufficient white space.	13		
Writing is grammatically correct and is short and concise.	13		
Graphics			
Uses graphics judiciously to enhance viewer interest.	12	1	
Do graphics convey CSR's mission?	11	2	

#### **CSR Web Needs Assessment**

Can you locate these items?			
Travel form entitled "Authorization to Attend Non-Government Sponsored Meetings," HHS-99	9	1	1
The form entitled "901 Request for Assignment Change"	11	1	1
NIH-Rockledge Shuttle (Green Line) Schedule	12	1	
Information contact for page content	12		1
Contact for technical problems	12		1
Search feature	13		
An online request for information form or "shopping basket"	5	4	4

## **Appendix B – Usability Problem Tables**

## **Internet Usability Problem Table**

Legend: Blue text links to a site outside CSR, Green text links to the CSR intranet site

	Usability Problem	Heuristic
MAIN	Missing alt tags for CSR logo and First Gov logo	7
	This page also contains	
Disclaimer & Privacy Statements	information on cookies, which is not evident from the link.	4, 6
-	This page also contains information on viewing PDF files, which is not evident from	
CSR Accessibility Statement	the link	4, 6
Welcome to CSR		
About CSR		
General Overview	Not formatted for viewing on a computer screen	7, 8
CSR: Past & Present	Alt tags for images of different buildings contain building names but no descriptive information	7
Organizational Chart	Chart image alt tag is simply "org chart". Contains link to phone directory	7
Office of Director chart	Image, no text, no alt tags	7
Division of Molecular and Cellular Mechanisms		
Division of Physiological Systems		
Division of Clinical & Population-based Studies		
Division of Receipt & Referral		

Integrated Review Groups (IRGs) and Study Section Guidelines	computer screen	7
Study Section Meeting Schedules	Schedules are confusing, not easily understood by people new to the site  Long and not formatted for	2
Referral & Review	Cobadulas are confusion and	
Submission and Assignment Process	computer screen	7
Role of the SRA	computer screen  Long and not formatted for	7
Guidelines for Study Section Chairs	computer screen  Long and not formatted for	7
	Long and not formatted for	
Best Practices		
News & Events		
NIH Job Opportunities		
Status Applicants		
What Your Resume or Application Must Contain		
Applying for a Federal Job		
Current Job Vacancy Announcements		
Employment Opportunities		
NIH Shuttle Schedule	The shuttle schedule was not accessible from all locations used in testing (403.6 Forbidden: IP address reject).	
Bethesda area map	The should be should be seen	
Two Rockledge Center map		
Visitor Information		
CSR Phone & E-mail Listing	"Return to top" button after Frequently Called Numbers does not have a link	4, 5
Division of Management Services chart	Image, no text, no alt tags	7

Reorganization Activities		
Update on Phase 2 of the Panel on Scientific Boundaries for Review	Long and not formatted for	
Report (3/28/01)	computer screen	7
Implementation Plan (4/12/00)		
Final Phase 1 Report (1/14/00)	Long and not formatted for computer screen	7
FAQs (1/14/00)		
AIDS/HIV Grant Applications		
Behavioral and Social Sciences,		
Epidemiology, Nursing and Methods Study Sections		
Clinical Oncology Study Section		
Neuroscience Study Sections		
Vaccine Special Emphasis Panel		
Small Business Applications		
Small Business Innovation Research Grant Application program		
Small Business Technology Transfer Grant Application program		
SBIR/STTR Phase I grant application Instructions and Forms [*Adobe PDF]		
SBIR Phase II grant application form		
STTR Phase II grant application form		
Receipt Dates for SBIR/STTR		
Review Guidelines for SBIR/STTR		
SBIR/STTR Review Committees	Completely different look and feel.	1, 3
SBIR Rosters	Should be with Study Section Rosters (user feedback)	2
AARR		
BBBP		

BCS		
BPC		
BDCN		
CVS		
CDF		
ENR		
GNS		
IMM		
IDM		
IFCN		
MDCN		
MSD		
NMS		
ONC		
PPS		
RPHB		
SNEM		
SRB		
Bioimaging		
SRA Handbook	Links to an intranet page not accessible outside NIH	5
Summary Statement Software	Links to an intranet page not accessible outside NIH	5
Study Section Rosters	Huge unbroken list of Study Sections (not depicted here)	2
Policy, Procedure & Review Guideline		
Overview of Peer Review Process	Repeat link	5
Glossary of Terms		

	Long and not formatted for	
Review Procedures for Scientific Review Group Meetings	computer screen	7
	Long and not formatted for	
Guidelines for Reviewers	computer screen	7
Guidelines for Review of Specific Applications		
	Long and not formatted for	
F06 Forgarty Senior International Fellowships (program discontinued)	computer screen	7
F31 NRSA Individual Predoctoral Fellowships for NIMH, NIDA, NIAAA, NIDCD,	Long and not formatted for	
NIDCR, and NCCAM	computer screen	7
F31 NRSA Individual Predoctoral Fellowships for Minority Students and Students	Long and not formatted for	
with Disabilities	computer screen	7
	Long and not formatted for	
F32 NRSA Individual Postdoctoral Fellowships	computer screen	7
F32 NRSA Individual Postdoctoral Fellowships - Checklist	Word document	1, 3
	Long and not formatted for	
F33 NRSA Individual Senior Fellowships	computer screen	7
IRPGInteractive Research Project Grants	Invalid link	5
	Long and not formatted for	
R01 Research Grants	computer screen	7
	Long and not formatted for	
R01 New Investigator Research Grants	computer screen	7
	Long and not formatted for	
R13 Conference Grants	computer screen	7
	Long and not formatted for	
R15 Academic Research Enhancement Awards (AREA)	computer screen	7
	Long and not formatted for	
R21 Pilot Projects or Feasibility Studies	computer screen	7
S10 Shared Instrumentation Grants		
SBIR/STTR Small Business Innovation Research/Small Business Technology		
Transfer Grants	PDF document	1, 3
	Long and not formatted for	
Review of New Investigator R01's	computer screen	7
	Long and not formatted for	
CSR Scoring Procedure	computer screen	7

Policy on Amended Neuroscience Grant Applications	Non-standard layout	4
Streamlined Review		
Peer Review Policy and Issues (from the Office of Extramural		
Research home page)		
Modular Grant Application and Award		
Inclusion of Children as Participants in Research Involving Human		
Subjects		
PHS Application Instructions & Forms; Receipt Dates		
NIH Schedule of Receipt Dates		
Public Health Service Grant (PHS 398) (revised 4/98)		
Application for a Continuation of a Public Health Service Grant (PHS		
2590) (revised 5/95)		
Application for an Individual National Research Service Award		
Fellowship (PHS 416-1) - Includes Predoctoral, Postdoctoral, and Senior		
Individual National Research Service Award Fellowships		
SBIR Phase I Grant Application Form		
SBIR Phase II Grant Application Form		
STTR Phase I Grant Application Form		
STTR Phase II Grant Application Form		
Peer Review Notes		
Special Reports on Peer Review Topics		
Best Practices (2/03/00)	Repeats links from Best Practices page	5
Update on Phase 2 of the Panel on Scientific Boundaries for Review		
Report (10/11/00)	Repeat link	5
Implementation Plan (4/12/00)	Repeat link	5
Final Phase 1 Report (1/14/00)	Repeat link	5
FAQs(1/14/00)	Repeat link	5

Report on the Review of Member Applications (12/8/99)		
Working Group on Review of Bioengineering and Technology and	Completely different look and	
Instrumentation Development Research (May 1999, Final Report)	feel.	1, 3
Report on Review of Clinical Research in the Center for Scientific	Long and not formatted for	
Review (June, 1998)	computer screen	7
Funding opportunities, Receipt Dates, Grants policy, Award		
Data (CRISP, Trends)		
Resources		
Office of Research Integrity (ORI) Sanctions Listing		
Other U.S. Dept. of Health and Human Services Sites		
U.S. Department of Health and Human Services		
CDC		
FDA		
Biomedical and Medical Sites		
Community of Science Web Server (COS)		
National Science Foundation (NSF)		
The Howard Hughes Medical Institute (HHM)		
The American Chemical Society (ACS)		
Federation of American Societies for Experimental Biology (FASEB)		
American Association for the Advancement of Science (AAAS)		
Federal Information Exchange (FEDIX)		
Archives		

## **Intranet Usability Problem Table**

Legend: Blue text links to a site outside CSR, Green text links to the CSR internet site

	Usability Problem	Heuristic
	Navbar on bottom of pages does not match hierarchy on home page. Missing Offices &	
Main	Branches, has IMPAC II	4
Useful Links		
Travel Forms & Guidelines		
Travel forms and procedures for non-Federal Reviewers		
FastResFax	Word document	1, 3
Non Federal Business First Class		
Non Federal Consultant Travel Instructions	Word document	1, 3
Non Federal Travel Procedures	Word document	1, 3
Reimbursement Vouchers	Word document	1, 3
WTS Fax Cover	Word document	1, 3
WTS Online		
Travel forms and procedures for Federal Reviewers (Omega)		
AEA Format - Individual	Word document	1, 3
AEA Format- Study Section	Word document	1, 3
Approved Travel Object Class Usage	Word document	1, 3
Federal Consultant Travel Instructions Consultant Travel	Word document	1, 3
Federal Business First Class		
Federal Local Claim	Word document	1, 3
Federal Out of Town Claim	Word document	1, 3
Federal Travel Procedures	Word document	1, 3
Federal Travel Request	Word document	1, 3
Frequently Asked Questions	Word document	1, 3
HHS-99		
International Reviewer Travel	Word document	1, 3

Joint University Appointment	Word document	1, 3
Notification of International Travel	Word document	1, 3
Omega Travel		
Sponsored Travel Package	Word document	1, 3
Staff Foreign Travel - Q & A	Word document	1, 3
Staff Foreign Travel	Word document	1, 3
Review Forms, Letters, Guidelines & Best Practices		
The Resume and Summary of Discussion: A Primer		
Review Procedures for Scientific Review Group Meetings		
Guidelines for Reviewers		
Streamlined Review Procedures used in CSR		
Gender and Minority Subject Codes	Word document	1, 3
Visitors - please sign in	Word document	1, 3
901 Request for Assignment Change	Word document	1, 3
Request for Study Section Meeting Supplies	Word document	1, 3
Supplies for Study Section Meeting/Mailing	Word document	1, 3
Acknowledgement Letter, Recurring SEP Review	RTF document	1, 3
F06: Senior International Fellowships		
F31: NRSA Predoctoral Fellowships for Minority Students and		
Students with Disabilities		
F31: NRSA Predoctoral Fellowship supported by NIMH, NIAA, and		
NIDA		
F32: NRSA Postdoctoral Fellowship		
F32: NRSA Postdoctoral Fellowship Checklist	Word document	1, 3
F33: NRSA Senior Fellowship Applications		
IRPG:Interactive Research Project Grants	Word document	1, 3
P01: P01, P41,and IRPG Applications		
P41: P01, P41,and IRPG Applications		

Computer Skills Assessment		
TAC (Training Advisory Committee)		
RPC (Review Policy Committee)		
POPOF (Project Officer/Program Official Forum)		
IC Directors(Institute & Center Directors)		
EPMC (Extramural Program Management Committee)		
EO (Executive Officers)		
Meeting Minutes/Announcements/Dates		
Rock Spring Development		
News & Events		
Accessing IMPAC II through Parachute		
OER Extramural Intranet IMPAC II information		
IMPAC II		
Meeting Rosters & Schedules		
Point Persons		
Role of the SRA		
Guidelines for Study Section Chairs		
Consistency in Review	Non-standard layout	4
Submission and Assignment Process		
SBIR/STTR: Small Business Applications	PDF document	1, 3
S10: Shared Instrumentation		
R21: Pilot Projects or Feasibility Studies		,
R21:Feasibility Studies for NI GMS	Word document	1, 3
R15: Academic Research Enhancement Award (AREA)		
R13: Conference Grant Applications		
R01 New Investigator Research Grants		
R01: Individual Research Grant Applications		

Security News & Alerts (see IT Security)	Links to IT Security secion	(not an error)
Customer Survey Narrative Overview	Word document	1, 3
Customer Survey Master Responses	Word doddmon	1, 0
Administrative Services Master Set Responses		
Financial Management Master Set Responses		
Technology Services - Committee Management Master Set		
Responses Human Resources Master Set Responses		
Employee Bulletin Board		
Bell Atlantic Warns Customers About Phone Scams		
"Call 54" Service Would Reveal Addresses in Maryland		
MVA Offers Marylanders an Opportunity to Make Their Driver and Vehicle Records Private		
Frederick AWS (CWS) Vanpool		
NIH Record		
Archives		
In Memory of Mary Shook (1/27/98)		
CSR welcomes Two SRAS (1/27/98)		
January 20, 1999; Electromagnetic Fields for Detection and Therapy	PDF document	1, 3
Resources	Number of navigation items along top does not major headings, missing Directors Ed Fund	4
Director's Education Fund		
Instructions	Non-standard layout and logo	4
Application Form	Non-standard layout, no logo	4
Directories		

CSR Staff Directory	Links to drg.nih.gov	4
DMS Assistance Guide	Non-standard layout and logo	4
NIH E-mail Directory		
OER Staff Directory		
NIH-1962-8 - Request for Approval and Authorization of Overtime		
Released 3/4/99	Invalid link	1, 5
Handbooks & Manuals		
ATAGs EMAIL Travel Roster Instructions	PowerPoint file	1, 3
GTA Handbook	Non-standard layout and logo	4
IMPAC II: Committee Management Documentation and Slide	-	
Presentations		
IMPAC II: Set Up a Meeting in the CM Module, How to		
ITAS manuals	Non-standard layout and logo	4
Procedures Manual for Administrative Officers	Word document	1, 3
Procedures Manual for Approving Officials	Word document	1, 3
Procedures Manual for Employees	Word document	1, 3
Procedures Manual for Timekeepers	Word document	1, 3
SRA Handbook		
Libraries	PowerPoint file	1, 3
NIH Library		
Rockledge Library	Non-standard layout	4
Miscellaneous		
CSR Core Slides	PowerPoint file	1, 3
	Links to page titled "CSR Policy	
Business Card templates	on Creating Business Cards"	4, 5
Instructions for Editing and Printing Business Cards	Non-standard layout	4
Business Card with NIH logo	Word document	1, 3
Business Card with CSR logo	Word document	1, 3
Contract Venue Possibilities	Non-standard layout	4

NIH Rockledge Shuttle Schedule		
Additional Shuttle Schedules and Information		
Archives		
Biomedical Technology Resources		
SKAMPS DRG Intranet	Non-standard layout	4
Offices & Branches		
CSR Director's Education Fund: Instructions	Links to a different page than the link given under Resources	1, 3, 4
CSR Director's Education Fund: Application Form	Non-standard layout, no logo	4
Assessment of Information Technology Requirements: Summary of Findings and Recommendations		
Forbush Report	Non-standard layout	4
The Integrated Review Group (IRG) as the Functional Unit of Review Support for IRG Staff A study for the CSR (McGowan Report) HTML version	Non-standard layout	4
The Integrated Review Group (IRG) as the Functional Unit of Review Support for IRG Staff A study for the CSR (McGowan Report) Powerpoint version		
Organizational Chart, Names and Contacts	Leads to Division of	1 1
Human Resources Branch	Management Services org chart	1, 4
Awards, Available types of		
Benefits Events		
Employee Express		
Federal Employees Health Benefits (FEHB) Program		
FEHB Brochures		
FEDweek (Free electronic newspaper for federal and postal employees and retirees)		

Human Resource Information and Benefits System (HRIBS)	Requires additional log-on	1, 5
Job vacancies, NIH		
NIH Human Resource Services	Links to a redirect	5
Pay Schedules		
Policies		
Quality of Work Life Strategy, NIH		
Thrift Savings Plan		
Voluntary Leave Transfer Program	Invalid link	1, 5
Electronic Help Desk		
IT Form For NEW Employees	Non-standard layout	4
Form for CSR Departure Employees	Non-standard layout	4
Request for Use of Personal or Non-Sanctioned Software form currently only for testing purposes	Non-standard, not the same as word link from HR policies section	4
Request for Short/Long Term Use of Government Equipment and Property Pass Forms: Short Term Formform currently only for testing purposes	<b>r</b> Non-standard layout	4
Request for Short/Long Term Use of Government Equipment and Property Pass Forms: Long Term Form form currently only for testing purposes	r Non-standard layout	4
Adobe Acrobat Reader 3.0, installing		
Audio-Conferencing, setting up teleconference calls for grant application reviews		
Conference room schedule, how to view		
Conversion+ Software, adding to a Windows95 Folder		
Dos Batch Files, running in Windows 95		
E-mail, submitting an announcement to the NIH-Staff list	Invalid link	1, 5

E-mail, submitting changes to the NIH Directory and E-mail forwarding service list	Invalid link	1, 5
Faxserve, the NIH Fax Service		,
McAfee Anti-Virus, downloading DAT files list	Invalid link	1, 5
Netscape Navigator 4.04, downloading and installing list	Link points to a Word document on a shared drive, file link not valid	1, 5
Using your PC in Standalone Mode		
Octel Voice Information System, helpful hints		
Outlook 97, printing to an HP LaserJet 5L Printer		
Parachute (remote access service): Parachute home page (CIT)		
Parachute (remote access service): Installation and configuration (CIT)	PowerPoint file, slow	1, 3
Parachute (remote access service): Parachute Instructions (Windows NT)	References Word document [http link], link not valid	1, 5
Printers, Network		
Network Printer Help (Linking and Viewing Print Que)		
Setting Up Printer Ports for Existing Printers		
Instructions for the HP Laserjet 4SI Printer	Text is displayed in all-caps	4
Procomm Plus		
Sharing Directories, Novell		
ITAS - Integrated Time and Attendance System		
ITAS WEB Version		
ITAS Upgrades		
ITAS WEB V3.2.3	Same link as ITAS Client Server V5.2.3	4, 5
ITAS Client Server V5.2.3	Same link as ITAS WEB V3.2.3	4, 5
ITAS WEB Upgrade		
ITAS Upgrade V5.2.1		

ITAS Upgrade V5.2		
ITAS Frequently Asked Questions (FAQ)	Links to a redirect	5
ITAS Web Based Tutorial (external to CSR)		
ITAS Manuals		
Procedures Manual for Administrative Officers	Word document	1, 3
Procedures Manual for Approving Officials	Word document	1, 3
Procedures Manual for Employees	Word document	1, 3
Procedures Manual for Timekeepers	Word document	1, 3
ITAS Support Contacts	Invalid link	1, 5
IT Security		
Trend Micro		
Network Associates (McAfee)	Invalid link	1, 5
CSR Fax Cover Sheet	Does not fit with IT Security	2
New Viruses and Trojans Network Associates (McAfee)	Invalid link	1, 5
Virus Libraries Network Associates (McAfee)		
Trend Micro Virus Encyclopedia		
CIAC HoaxBusters		
Trend Micro		
Myths and Urban Legends	Links to a redirect	5
F-Secure Corporation - Datafellows		
IT Security Sites		
Center for Information Technology (CIT), NIH	Same link as CIAC (Computer Incident Advisory Capability - Dept. of Energy)  Same link as Center for	4, 5
CIAC (Computer Incident Advisory Capability - Dept. of Energy)	Information Technology (CIT), NIH	4, 5
CERT Coordination Center (Computer Emergency Response Team - Carnegie Mellon)		

SANS Institute		
IT Policy - Guidelines		
NIH Guidance on Unwanted E-mail, Spam, and Chain		
Letters(5/31/00)	Invalid link	1, 5
NIH Policy on Passwords (3/20/00)		
NIH Password Guidelines		
NIH IT Security Policy (DHHS AIS Security Guidelines, chain letters,		
etc.)		
NIHnet Security Plan Rules of Behavior	Invalid link	1, 5
NIH Policy on Warning Banners		
CSD E Mail Baliay (7/25/2000)	Duplicated link, CSR Staff E-	4.5
CSR E-Mail Policy (7/25/2000) CSR Network Remote Access Policy	MAIL Policy for NIH-ALL	4, 5
CSR Network Remote Access Policy	Duplicated link, CSR E-Mail	
CSR Staff E-MAIL Policy for NIH-ALL	Policy (7/25/2000)	4, 5
CSR Director's Statement on 'CSR All E-Mail' Issue: (1/20/2000)	Link causes runtime error	5
CSR Policy on Loaner Personal Computers	Duplicate link	4, 5
Recommendations and Guidelines for Use of the CSR WWW Server	Duplicate link	4, 5
Procedures for Submitting Documents for Posting on the Web	Duplicate link	4, 5
CSR's IT Security Orientation		
NIH Security Awareness Training		
Virus Primer		
Recognizing a Chain Letter		
FAQ's about NIH's IT Security Program	Invalid link	1, 5
CSR Security Points of Contact	Non-standard layout	4
Office 2000 Instructions		
Netscape 4.5 Instructions		

Windows 95 Y2K patch		
Committees		
CSR Representatives on Trans-NIH Committees	Word document	1, 3
Employee Advisory Committee		
Our Mission		
Our Members		
Meeting Information		
Employee-of-the-Month nomination form	No logo or header	4
Employee-of-the-Month list of awardees		
GTA Council	Pages use frames	4, 7
GTA Council Charter		
Council Members		
Scheduled Meeting Dates		
Council Accomplishments		
GTA/SRA Joint Resolution		
Certificate of Recognition		
GTA Handbook		
SRA Council (CSR ONLY)	Look and feel completely different from rest of CSR intranet	4
SRA Council Charter		
Council Membership		
Scheduled Meeting Dates		
SRA Council Meeting Dates and Agenda		
Study Section Meeting Dates		
Council Minutes	Word document	1, 3
Council Issues		
Council Issues	Word document	1, 3
Pending Issues	Word document	1, 3

CSR Policy Statements		
Policies		
Minutes	Word documents	1, 3
Members		
Charter		
Information Resources Advisory Committee (IRAC)		
NIH Extramural Committees		
CSR Calendar	Opens Outlook	1, 3
Slide Presentations		5
Training Opportunities (Under Construction)	No link	
SRA Training Workshops		
Seminar Committee		
SRA Handbook	Returns to the CSR intranet look and feel	4
SRA Voting Groups	Look and feel completely different from rest of CSR intranet, and from rest of SRA Council area	4
Extramural Staff Training and Development	No link	5
CSR Policy Statements	Links to different but very similar page to "HR - Policy"	1, 4, 5
RPC Meeting Minutes July 19, 2000		
Appeal Procedures		
OER Extramural Intranet Policy Documents		
Project Officers-Program Officials Forum (POPOF)		
Small business Funding Opportunities		
OER Peer review Policy and Issues		
CRISP-Database of Biomedical Researh Funded by NIH		
Office of Laboratory Animal welfare (OLAW)		
Office for Human Research Protection		
Point Persons for Specific Grant Applications  Review Policies		

CSR Procedures		
CSR Leave and Overtime Policies		
CSR Training Guidelines		
Emergency Dismissal/Closure Procedures (includes inclement		
weather)	No link	5
Benefits - Thrift Savings Plan - TSP	PowerPoint file	1, 3
GTA Overtime at Initial Review Group Meetings Background		
GTA Overtime at Initial Review Group Meetings Questions and		
Answers		
Flexible Work Schedules (FWS) Policy		
Flexiplace		
Flexitour		
CSR Policy on Computer Issuance		
CSR Policy on Loaner Personal Computers (04/5/1999)	Non-standard layout	4
CSR E-Mail Policy (7/25/2000)	Non-standard layout	4
CSR Director's Statement on 'CSR All E-Mail' Issue (1/20/2000)	Link causes runtime error	5
CSR Network Remote Access Policy	No link	5
CSR Staff E-MAIL Policy for NIH-ALL		
OIRM Policy Papers, Guidance, and Regulations		
Procedures for Submitting Documents for Posting on the Web		
Recommendations and Guidelines for Use of the CSR WWW Server	Extremely long text not formatted for viewing on computer screen	7, 8
Request for Use of Personal or Non-Sanctioned Software form		
currently only for testing purposes	Word document	1, 3
CSR Password Policy	Word document	1, 3
Employee Departure Form Documentation	Word document	1, 3
Form for CSR Employees Departure		

Clearance of Personnel For Separation or Transfer Form NIH		
2737-2	Word document	1, 3
Anti-Lobbying Act		
Outside Activities		
Political Activities Restrictions (Hatch Act)		
Gifts Between Employees		
Parties, Social Events, and Charitable Fundraising		
Gifts From Outside Sources		
Promotion of SRAs to GS-14		
CSR Smoking Cessation Policy		
Departmental AIDS policy		