

### Overall Usability Concern:

Users seemed to be unclear about the difference between “bibliography” and “repository”. For example, Subject 6 commented: “It is a little confusing, the bibliography versus repository. It seems that they are looking like basically the same thing.” Consequently, the workflow of contributing something to the website is not easy to understand for users. The workflow for current website design is shown in Figure 1. From the user’s perspective, resources and citations are handled separately by the system. If the user wants to contribute his publication to the website, he has to input the same publication metadata twice. The website does provide a way of linking a citation to existing resources on the website (the “Citation for” section), but none of the test subjects understood that section.

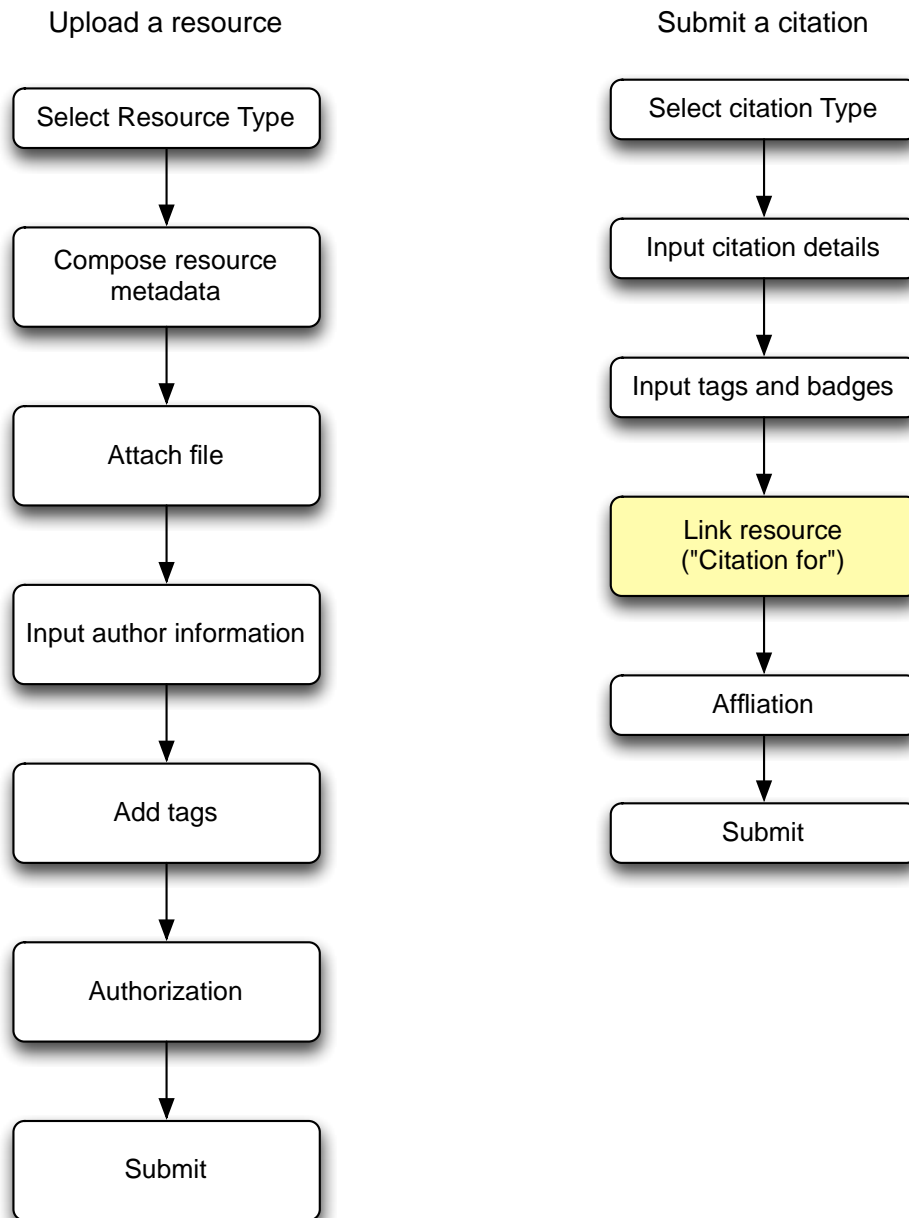
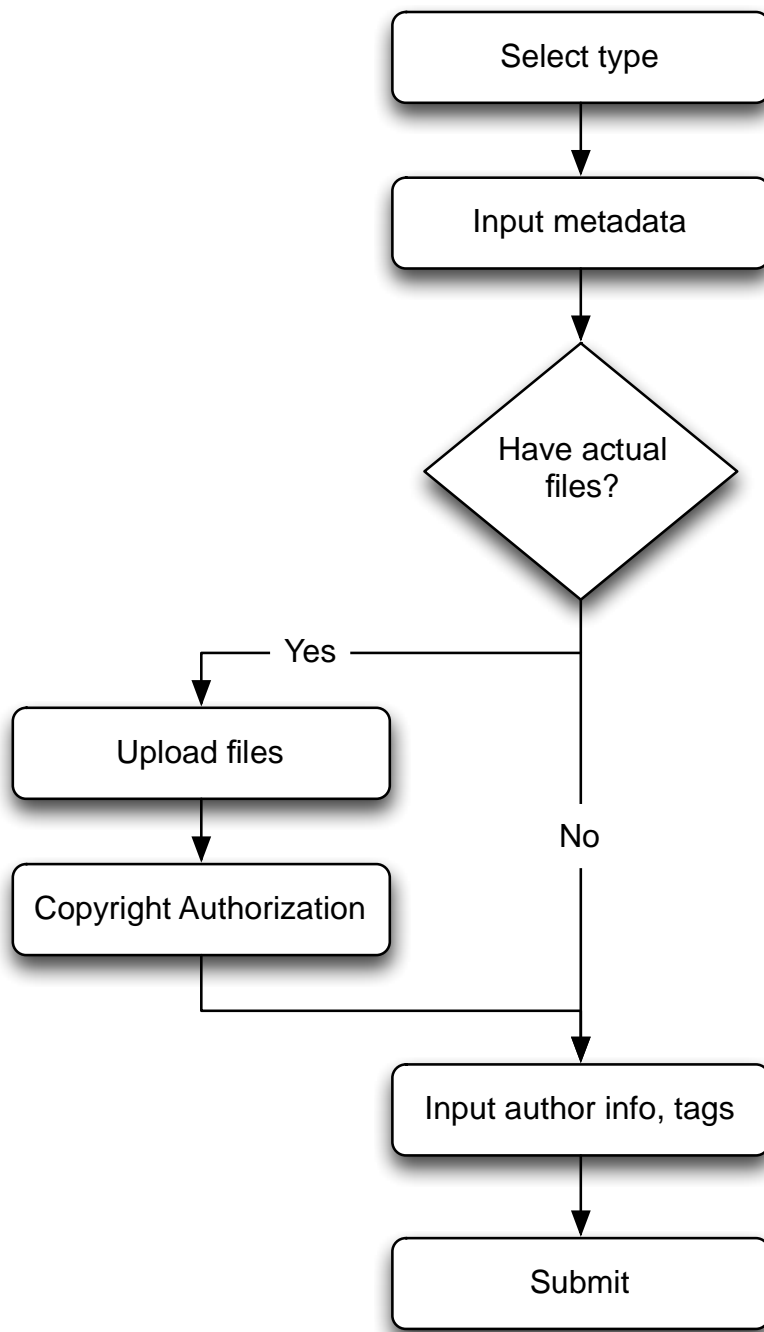


Figure 1. Current workflow.




Ideally, the HABRI Central website should have one bibliography (or repository) space. There should be just one task flow for users to go through if they want to contribute to the website (Figure 2). This new workflow can potentially address a number of specific usability issues (4, 6, 30, 45), although it may require a significant change of the site's data structure and information flow.

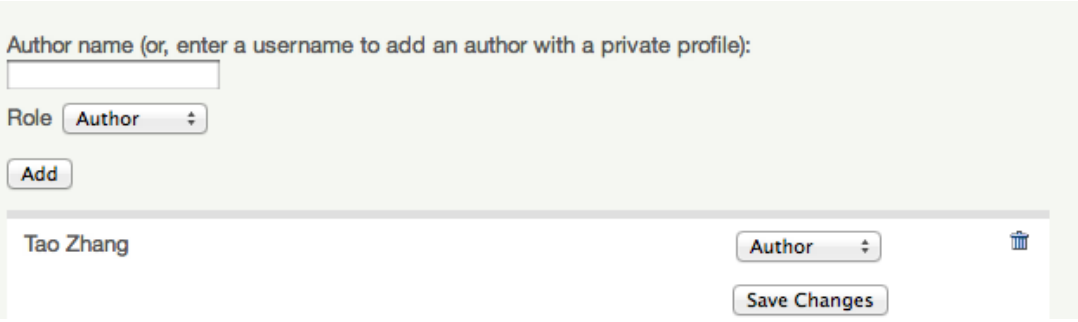
### Contribute to HABRI Central

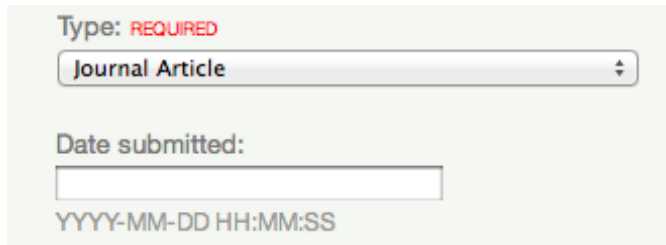



**Figure 2. Proposed new workflow.**

## Specific Usability Issues:

No.	Usability Issues	Subjects Affected	Category	Solution
1	The search box on the homepage does not have a "search" button. The magnifying glass and the upside down triangle are not clickable. The user has to press Enter on the keyboard to submit search.	Pilot	UI	Add a "Search" button next to the search box.
				
2	On the “Contribute: Start” page, resource type selection is not obvious for users to see as the first step of uploading a resource.	Pilot, 1	UI	<p>1. Redesign this page so that resource type selection becomes the obvious choice for users to proceed.</p> <p>2. This page should be “Step 1” of the contributing process and should use the same navigation indicator as other steps (see figure below).</p> <p><b>Contribute: Start: Step 1: Compose</b></p> 
				

3	MyHUB does have action or task links (e.g., submit a resource). The user commented that she kept going to myHUB for everything related to herself like uploading resource and submitting citation.	Pilot	UI	This could be a usability issue or design choice.
4	Problems on the “Contribute: Start: Step 3: Authors” page: 1. The user does not know that she can only add one author at a time (Subject 2 typed authors as “Beck, A. & Herzog, H.”); 2. When authors are added, she does not know she needs to click on “Save Changes”; 3. If the user types the author name too fast, the drop down list for selecting author will not appear; 4. The user doesn’t know her names is already in the authors list because she doesn’t know what that box is for.	Pilot, 1, 2, 3, 4, 5, 6	UI	<p>1. Provide clear instruction and feedback to users so that they know they can only add one author at a time; 2. When the user selects an author from the drop down list, that author should be automatically added to the author list, and the user should not be required to click on “Add”; 3. When the user makes changes to the author list (e.g., changing a person’s role from “Author” to “Submitter”, the system should automatically save the changes and the user should not be required to click on “Save Changes”; 4. The box showing authors added to the list should have a title like “Authors Added” and column titles like “Name” and “Role”.</p> <p>Is it true that the user has to click on "Save Changes" in the authors box even if she just added authors?</p>
				

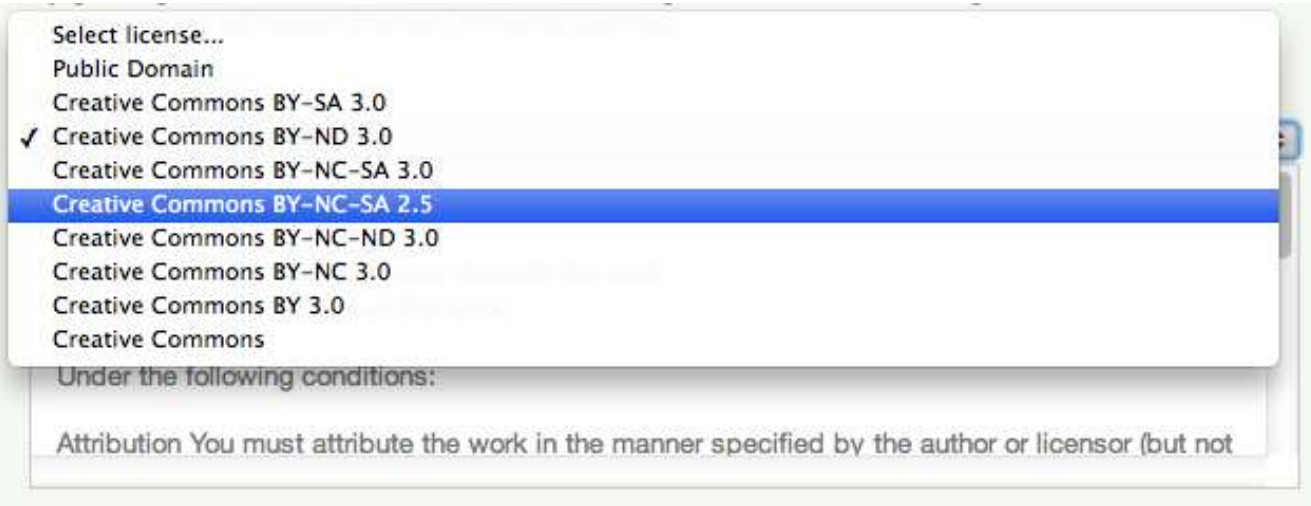
5	When the user finished registration, the website did not go back to her previous page (in this case it is the resource contribution page as the user was trying to upload a resource).	Pilot	Workflow	If possible, modify the validation link in the email sent to the user so that when user clicks on the link, the system first validates the user's email and then redirects to the last page the user was trying to access before registration.
6	There is no "Upload" link in "Bibliography" menu, but the "Resource" menu has an "Upload" link.	2	UI	Add an "Upload" or "Add" link in the "Bibliography" menu.
7	On "Citations: Add" page, "Date Submitted" was not automatically generated after selecting "journal article". Even if the user has to fill in the date and time, the date submitted format (YYYY-MM-DD HH:MM:SS) is not user friendly. It would be impossible to fill in the exact second.	Pilot, 4, 5	Workflow, UI	Why does the system require the user to fill in this "Date Submitted" information and especially the exact time? If this information is necessary, consider changing the input format to a calendar date selector or similar UI components so that the system can have some control of the input format.
				
8	The user did a search to locate the citation she just submitted. In the search results, it is not clear how to differentiate citation and resource for the same journal article.	Pilot	Workflow, UI	<p>The user can actually use the "All Categories" on the right of search results to look at only citations or resources. This could be a learning issue.</p> <p>Consider using visual indicators to show citations and resources in the search results.</p>

9	The user has to generate tags when posting a question.	Pilot, 1, 5, 6	Workflow	Why tags are required for questions? Is there any way to have tags suggested for the user?
10	The user typed her question into the "Tags" box.	Pilot, 2, 3	Workflow, UI	The order of "Question" and "Tags" should be switched.
				
11	Is possible for HABRI Central to support Open ID system? That way the user does not need to come up with a user name and password.		Feature Request	Benefits of Open ID system: <a href="http://openid.net/get-an-openid/individuals/">http://openid.net/get-an-openid/individuals/</a>
12	Is possible for the user to edit the question after it is posted?		Feature Request	Check <a href="http://www.stackoverflow.com">www.stackoverflow.com</a> to see how the Q&A is implemented.
13	"New Question" link (or "Create user group") is not easy to find.	Pilot, 6	UI	Move the link to top left area of the page content. Reference: The F-shape reading pattern, <a href="http://www.useit.com/alertbox/reading_pattern.html">http://www.useit.com/alertbox/reading_pattern.html</a>
14	The user's email address can be highlighted on the registration confirmation page.		Feature Request	

15	On account registration page, subject did not type in the correct CAPTCHA response and check the "Agree to terms of use" box. The page gave a generic error message. Subject noticed the error in CAPTCHA first and then noticed the "Terms & Conditions" check box when moving cursor to the "Create Account" button.	1	Feedback	Reword the error message to let the user know where exactly the error is.
16	On "Compose" page of uploading a resource, "START" is capitalized but others ("Compose", "Attach", "Authors", "Tags", "Review") have only first letter capitalized. Some of the words are verbs but the others are nouns.		UI	Make sure the capitalization of wording is consistent.
17	Section title on "Review" page when uploading a resource is confusing: "Contribute: Start: Step 5: Review". The only way for subject to go back to previous steps is to click on the browser's back button. Also this page does not show the steps of uploading a resource like previous pages do (the navigation indicator).	6	UI	1. Change the title; 2. Use consistent navigation indicators across all steps of uploading a resource.
18	The "Submit a citation" link is not easy to find and it is under "Help".	1, 6	UI	Same as Issue 13. Move the link to top left area of the page content.

19	The "New question" link is on the upper right corner of the page and it is difficult for the subject to find it.	1, 6	UI	Same as Issue 13. Move the link to top left area of the page content.
20	When adding question, the "Question must have at least one tag" error message is a popup alert box. After the subject clicked on "OK" in that dialog, the webpage was empty for at least two seconds. It did not return to the question fill-in page immediately.	1	UI	In elsewhere of the website, error messages are displayed on the same page the user is working on (no popup alert box is used). The system should present error messages in a consistent way.  Check this for any implementation issues.
21	Clicking on "More Resources" on the homepage gives an error message: "There are no new items for the time period/category selected."	2	Technical	Check this for any implementation issues.
22	The section title for the calendar is "Quick Access". The meaning is not clear.	2, 6	UI	Change the title.
23	The table listing the jobs can be improved. It can have more categories. For example, the jobs can be grouped by small animal-related and large animal-related. Or internal medicine, laboratory animals, different majors from Vet School, research vs. hospital jobs, etc.	2	Feature Request	





24	The "Contact Us" link is not in the 'About Us" menu. Subject did not find the "Contact Us" link at the bottom of the page.	2	UI	Consider adding a "Contact Us" link in the "About Us" menu.
25	The "Library" menu has a "Repository" link. When clicking on it, the page opened has a title "Resources".	3	UI	Consider changing the "Repository" to "Resources". Make sure the terminology is consistent.  Subject 3 did not understand what "repository" means.
26	There is no apparent search box after I click on "Need Help".	2	UI	The user expected an immediate search box so he can search in the help documentation. The search box will appear after clicking on "Knowledge Base". Consider adding a search box in the help area that shows up after clicking on "Need Help?" button.
27	On the "Review" page of uploading a resource, it is difficult for the user to know the difference of those licenses.	2, 4	UI	Is there a better way to show the different licenses? For example, using a comparison table may be better for the user to make a selection.
				

28	On the "Contribute: Compose" page, subject initially put journal title in "place of publication".	2	UI, Workflow	<p>"Place of publication" is not very clear. Consider changing it to "Publisher City".</p> <p>Should the fields in "Details" be listed in the order of importance? For example, journal title, volume No., issue number, page numbers, ... Check how EndNote or other bibliography manager implements this.</p>
29	The title for the confirmation page is "Contribute: Contribution Submitted: Step 5: Review". This is probably too complex.	2	UI	Change this title.
30	In the "Citation for" section, subject selected "Article" in the table column without inputting other information. When he clicked on "Save", there was an error message saying "Association must have an object ID." The information he inputted previously was gone. He had to input the article information again.	2, 4	Technical	<p>Check for implementation issues.</p> <p>More importantly, none of the subjects understand what the "Citation for" is.</p>


	<div><div>Citation for</div><table><tr><th>ID</th><th>Type</th><th>Table</th></tr><tr><td><input type="text"/></td><td><input type="text"/></td><td>Select... ▴ ▾</td></tr><tr><td><input type="text"/></td><td><input type="text"/></td><td>Select... ▴ ▾</td></tr><tr><td><input type="text"/></td><td><input type="text"/></td><td>Select... ▴ ▾</td></tr><tr><td><input type="text"/></td><td><input type="text"/></td><td>Select... ▴ ▾</td></tr><tr><td><input type="text"/></td><td><input type="text"/></td><td>Select... ▴ ▾</td></tr><tr><td colspan="3"><a href="#">+ Add a row</a></td></tr></table></div>				ID	Type	Table	<input type="text"/>	<input type="text"/>	Select... ▴ ▾	<input type="text"/>	<input type="text"/>	Select... ▴ ▾	<input type="text"/>	<input type="text"/>	Select... ▴ ▾	<input type="text"/>	<input type="text"/>	Select... ▴ ▾	<input type="text"/>	<input type="text"/>	Select... ▴ ▾	<a href="#">+ Add a row</a>		
ID	Type	Table																							
<input type="text"/>	<input type="text"/>	Select... ▴ ▾																							
<input type="text"/>	<input type="text"/>	Select... ▴ ▾																							
<input type="text"/>	<input type="text"/>	Select... ▴ ▾																							
<input type="text"/>	<input type="text"/>	Select... ▴ ▾																							
<input type="text"/>	<input type="text"/>	Select... ▴ ▾																							
<a href="#">+ Add a row</a>																									
31	It will be nice if the search has spelling correction or suggestion.	2	Feature Request																						
32	I would like to have some kind of "saved search" or "saved articles" feature in my HUB. Or maybe the website can be better integrated with EndNote so I can save articles or citations into EndNote.	2	Feature Request																						
33	The colors are dull, pictures on the homepage look unprofessional; Pictures don't match watch stories are about; Fonts are small.	3	Visual	Adjust the visual design.																					
34	"Messages" on a Group page only shows sent messages.	3	UI	<p>In Sent Messages list, the second column title is "Message From". Should it be "Sent To"? This is not clear. Consider changing "Date" to "Time" for third column title. Use "Today 8AM, Yesterday 9PM, Wednesday, February 23, ..." for message date and time.</p> <p>It should also show messages received.</p>																					

	<div><div>Sent Messages</div><div>Send New Message</div></div> <div><div>Sent Messages (0)</div><div><table><tr><th>Subject</th><th>Message From</th><th>Date Sent</th></tr><tr><td colspan="3">No messages found</td></tr></table></div><div>Start Prev Next End</div><div>Display # 10 Results 1 - 0 of 0</div></div>				Subject	Message From	Date Sent	No messages found		
Subject	Message From	Date Sent								
No messages found										
35	When uploading a resource, subject did not know what to select under Group Ownership.	4, 5	Workflow	If the user does not belong to any group, maybe it is better to not know any group ownership option.						
	<div><div>Group ownership</div><div><div>Group: OPTIONAL</div><div>Select group ...</div></div><div><div>Access level: OPTIONAL</div><div>Public</div></div><div><div>Public = anyone may view/download the resource</div><div>Protected = abstract is visible, files restricted to group members</div><div>Private = only visible to group members</div></div></div>									
36	It is not clear what “Text Snippet” is on the “Citations: Add” page.	4	UI, Workflow	Clarify this.						
37	It is not clear what “Badges” is on the “Citations: Add” page.	4	UI, Workflow	Clarify this. What is the difference from tags? (Ask Christopher)						
	<div><div>Badges: OPTIONAL</div><div></div><div>Enter badges separated by commas (e.g.evidence-based, peer-reviewed).</div></div>									

38	On member's profile page, the "Send Message" link is in the top right corner of the page content area. That link is hard for users to find.	4, 6	UI	Same as Issue 13. Move the link to top left area of the page content.
	<div> <div>Christopher C Charles</div> <div>  <a href="#">Edit profile</a>  <a href="#">Send Message</a> </div> </div> <div> <div>Profile</div> <div>Contributions</div> <div>Groups</div> <div>Usage</div> <div>Favorites</div> <div>Messages</div> <div>Resume</div> <div>Blog</div> </div>			
39	The events list does not list locations of the events.	6	UI	Show the location of each event in the list display.

<div> <div>Year</div> <div>Month</div> <div>Week</div> <div>Day</div> </div> <hr/> <div> <div>02 Apr, 2012</div> <div><b>Petfood Forum 2012</b></div> <div>08:00 AM (CDT)</div> <div><b>Category:</b> Trade Show</div> <div>to 04 Apr, 2012</div> <div>05:00 PM (CDT)</div> <div>Join keynote speakers Betsy Banks Saul, founder of Petfinder.com, and Michael Taylor, for the global petfood industry. You won't want to miss this 20th edition of Petfood Foru ...</div> </div> <hr/> <div> <div>04 Apr, 2012</div> <div><b>Petfood Workshop 2012: New Product Development</b></div> <div>08:00 AM (CDT)</div> <div><b>Category:</b> Trade Show</div> <div>to 05 Apr, 2012</div> <div>05:00 PM (CDT)</div> <div>Immediately following Petfood Forum 2012, Petfood Workshop focuses on new product the petfood industry's continual growth, but new product development requires much n from ...</div> </div>				
40	I like to have that option just whether I want to be in the website's member list or not. Just because people have different reasons not being able to be searched.	6	Feature Request	<p>You can still see members' names even if they have private profiles.</p> <div> <div></div> <div>Austin, Jessica J</div> </div> <div> <div></div> <div>Avner, Jeffrey</div> </div> <div> <div></div> <div>Bachi, Keren</div> </div>

41	Users may type all kinds of keywords in the search box.	6	Feature Request	<p>Enhance the website's search box to include search results from the help documentation.</p> <p>Reference: How Users Search the Library from a Single Search Box, <a href="http://crl.acrl.org/content/early/2012/01/09/crl-321.short">http://crl.acrl.org/content/early/2012/01/09/crl-321.short</a></p>
	<div data-bbox="296 412 1755 1338"> <div> Search All <input type="text" value="dog"/> Search <a href="#">About this search tool</a> </div> <div> <div> <b>Articles</b> <p><b>Dogs</b>  <i>Nature Medicine</i>, V. 16, 2010   Full Text Online</p> <p><b>DOG</b>  <i>Milton Quarterly</i>, V. 40, 2006   Full Text Online</p> <p><b>Dog</b>  Author: Coulehan, Jack  <i>JAMA: The Journal of the American Medical Association</i>, V. 295, 2006   Full Text Online</p> <p><a href="#">See all 676,109 articles from Summon</a></p> </div> <div> <b>Databases</b> <p>No database titles found. Please browse <a href="#">Database Titles</a>.</p> </div> <div> <b>Browse by subject</b> <ul style="list-style-type: none"> <li>Veterinary Medicine</li> <li>Immunology</li> <li>Microbiology</li> </ul> <p><a href="#">See all subjects</a></p> </div> </div> <div> <div> <b>Books &amp; Media</b> <p><b>Infectious diseases of the dog and cat</b>  Published: c2012.  Veterinary Medicine Library</p> <p><b>Dog inSight</b>  Author: Reid, Pamela, 1960-  Published: c2012.  Veterinary Medicine Library</p> <p><b>Barron's dog training bible</b>  Author: Arden, Andrea.  Published: c2012.  Veterinary Medicine Library</p> <p><a href="#">See all 7,978 books</a></p> </div> <div> <b>Browse by format</b> <ul style="list-style-type: none"> <li>Book (7,328)</li> <li>Online (964)</li> <li>Videos and DVDs (289)</li> </ul> <p><a href="#">See all formats</a></p> </div> <div> <b>Journals</b> <ul style="list-style-type: none"> <li>APDT Chronicle of the Dog</li> <li>Dog world</li> <li>Clifford the big red dog</li> </ul> <p><a href="#">See all 13 journals</a></p> </div> </div> <div> <div> <b>Library Website</b> <p><b>Veterinary Medicine Library News » National Dog Bite Prevention Week, May 1...</b>  Veterinary Medicine Library News » National Dog Bite Prevention Week, May 15  <a href="http://news.lib.ncsu.edu/vetmed/2011/05/13/national-dog-bite-prevention-week-may-15-21-2011/">http://news.lib.ncsu.edu/vetmed/2011/05/13/national-dog-bite-prevention-week-may-15-21-2011/</a></p> <p><b>Veterinary Medicine Library News</b>  makings of a durable <i>dog</i> Hastings, Pat. The power of wagging tails : a doctor's guide to  <a href="http://news.lib.ncsu.edu/vetmed/">http://news.lib.ncsu.edu/vetmed/</a></p> <p><b>Veterinary Medicine Library News » New Materials</b>  makings of a durable <i>dog</i> Hastings, Pat. The power of wagging tails : a doctor's guide to  <a href="http://news.lib.ncsu.edu/vetmed/category/new-materials/">http://news.lib.ncsu.edu/vetmed/category/new-materials/</a></p> <p><a href="#">See all 582 website results</a></p> </div> <div> <b>More Search Options</b> <p>Find results for <b>dog</b> in:</p> <ul style="list-style-type: none"> <li>NCSU Scholarly Publications Repository</li> <li>NCSU Electronic Theses &amp; Dissertations</li> <li>Historical State</li> <li>Google Scholar</li> </ul> </div> </div> </div>			

42	The “Repository” menu has a link called “Upload”. When clicking on it, the page title is “Contribute”.		UI	Menu item should be consistent with page title.
				
43	There are many tags like "the health of english" or "english", which do not make sense.		Technical	Maybe it is necessary to restrict the number of auto-generated tags?
44	Tags shown before search results are overwhelming and subject has to scroll down a page to see the search results.	6	UI	Consider moving the tags to the side of search results? Or collapse tags and use a link “See more tags...”.



## Search

health

Search

Results (page 1 of 43)

Health health and well-being pet health Public health Health Promotion animal health mental health health care health centres health centers Health Facilities Health Status Holistic Health Women's Health Attitude to Health World Health reproductive health health hazards health policy community health health services health benefits human health health and happiness environmental health Urban Health Health Behavior Health Surveys health foods health insurance health protection Health Education Family Health Health Personnel physical health psychological health health problem Health Resorts Department of Health health attitudes owner health psychosocial health health worries Health Impairments health staff adolescent health health evaluations self-reported health global health health systems self-perceived health health consequences physiological health health problems child health health risks health literacy Health Service Needs health benefit wildlife health health of english health of bulldogs Animal health and hygiene health care costs Health Services [UU350] Health Promotion/ methods Attitude of Health Personnel Quality of Health Care Community Health Nursing Health Services for the Aged World Health Organization Prey -- Health aspects. Health Economics [EE118] primary health care Rural Health [VV550] Health Promotion/history Voluntary Health Agencies Health Facility Environment National Institutes of Health (U.S.) Health Services Research Attitude to Health/ethnology Community Health Services Health Services Needs and Demand Health Status Indicators

All Categories (862)

Events (20)

Groups (4)

Members (3)

Resources (15)

Journal Articles (7)

Books (8)

Questions (4)

Citations (816)

45	When adding a citation, it looks like the system does not check whether the authors typed by the user are already in the system or not.		Technical, Workflow	Is author name part of the system's entities? Are author names checked manually by the website's staff? If so, this could be potentially a lot of work and we should think about how to speed it up. Maybe the system can check the author names automatically in the background and prompt the user to select if there is a match?
46	After entering the member information page from the group page, it is not possible to go back to the group page. Subject had to choose "Community" menu, select "Groups", and search for the group she just joined in.		UI, Navigation	Provide a way to go back to the group page from group member profile page.

47	Subject does not know what “My Sessions” is in myHUB.	6	UI	Clarify this.
48	I don't exactly understand workspace in “My Tools”. It seems like it should have questions I asked and what people are saying.	6	UI	Clarify this. (Ask Christopher if it is relevant to HABRI Central or if it is relic.)