High–level accessibility review – LAA
(Microbiology Society Platform)

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Top 3 problems for the Microbiology Society Platform

This high-level assessment covers limited portions and functionality of the Microbiology Society Platform. The assessment revealed issues with assistive technology compatibility, resulting in some users missing information required to understand content, states and operate functions. It is important to keep in mind that the findings represent a high-level assessment, and do not reflect the results of a Deque Comprehensive Web Assessment.

1. **Focus Visible –** Most interactive elements are missing a visible focus indicator
2. **Link color contrast –** (Nearly) all links do not have a visual indicator other than color and the color of the link does not have at least 3:1 contrast with the surrounding text
3. **Keyboard –** Many issues exist with the ability to operate core functionality of the platform with a keyboard alone. Issues of this type affect many types of users, not just screen reader users.

Accessibility findings

Project wide issues

The issues presented in this section were identified in multiple pages and are recorded here to avoid repetition. These are applicable to each screen. Due to particularities, similar issues are still reported on a page per page basis, where applicable.

Automated findings using Axe

Issues found through automated testing come from the Axe plugin, an open source accessibility testing tool that is available for Chrome, Firefox and Edge. Details here: https://www.deque.com/products/axe/.

1. **SC 1.3.1 A** – <li class="dropdown-toggle"> has parent ul but the role is set as menu which is not semantically correct.
2. **SC 2.4.1 A** – Titles on Frames – Iframes for youtube videos are missing title attribute

Additional manual findings using NVDA screen reader

1. **SC 2.4.7 AA** – Focus Visible – Microbiology Logo does not have visible focus
2. **SC 2.4.7 AA** – Focus Visible – Search Icon does not have visible focus
3. **SC 2.4.7 AA** – Focus Visible – Account menu does not have visible focus
4. **SC 2.4.7 AA** – Focus Visible – Cart menu does not have visible focus
5. **SC 2.4.7 AA** – Focus Visible – Site menu does not have visible focus
6. **SC 2.4.7 AA** – Focus Visible – Publication Menu does not have visible focus
7. **SC 2.4.7 AA** – Focus Visible – Information for authors menu does not have visible focus
8. **SC 2.4.7 AA** – Focus Visible – Microbiology Society menu does not have visible focus
9. **SC 4.1.2 A** – Name, Role, Value – Main Site menu expanded and collapsed states of submenus are reversed and incorrect.
10. **SC 3.3.2 A** – Visible Label – Search box in search menu does not have a persistent label. The placeholder text goes away when the user interacts with the field.
11. **SC 2.1.1 A** – Keyboard – Links under the footer menus (About Us, Publications, and Resources) cannot be reached with the keyboard alone
12. **SC 2.4.3 A** – Focus Order – Focus order is not logical in the main navigation. The search, account, cart, and site menu on the right receive focus first then it jumps back to the left to publications, information for authors, and microbiology society menus.

1. Landing Page

Source: https://offcampus.lib.washington.edu/login?url=http://www.microbiologyresearch.org
Test case: Initial interface – menus & submenus, search box and All Content drop-down menu.

Automated findings using Axe
1. **SC 4.1.1 A** – Unique IDs – Multiple duplicate id's under the twitter widget
2. **SC 4.1.2 A** – Name, Role, Value – Multiple instances of div with aria-label and aria-labelledby with no role set on the div. Mainly occur in the twitter widget
3. **SC 1.4.3 A** – Color Contrast – Blue links under twitter widget has insufficient color contrast of 2.8 (foreground color: #2aa0f0, background color: #ffffff. Expected contrast ratio of 4.5:1
4. **SC 2.4.6 AA** – Descriptive Labels – Multiple "subscribe to RSS" links that link to different rss feeds. Accessible text should be specific to the link destination. EX: arial-label="Subscribe to RSS Feed Latest Content…"
5. **SC 4.1.2 A** – Name, Role, Value – Multiple instances of links with no accessible text under the twitter widget

Additional manual findings using NVDA screen reader
1. **SC 1.4.1 A** – Link Color Contrast – Article title links. Links are dark gray with no other visual indicator and the standard copy next to it is exactly the same color. Without an additional visual indicator contrast between links and surrounding text must be at least 3:1.
2. **SC 1.4.1 A** – Link Color Contrast – Article author links. Links are dark gray with no other visual indicator and the standard copy next to it is exactly the same color. Without an additional visual indicator contrast between links and surrounding text must be at least 3:1.
3. **SC 3.3.2 A** – Visible Label – Search box placeholder text acts as the label for the search field but the label is not persistent. It disappears once the user interacts with the field.
4. **SC 2.4.3 A** – Focus Order – Focus order is not logical in the main content area. Focus starts at the social icons in the third column on the far right then jumps back to the first column, second column and finally returning to the youtube video and twitter widget in the third column

2. Search Results - Salmonella

Source: https://offcampus.lib.washington.edu/login?url=http://www.microbiologyresearch.org
Test case: Choose Microbiology from the All Content menu and Search for "Salmonella". Test the Sort By drop-down menu to Newest first. Test filter button and limit the Publication to Microbiology by checking the check box and limit Publication date to January 2019 to December 2019 and then click Apply.

Test the results page including the +More menu and features.

Automated findings using Axe

1. **SC 2.4.6 AA** – Descriptive Labels – Multiple "read more" links that link to different articles. Accessible text should be specific to the link destination. EX: arial-label="Read more about Transcriptional regulation…"

Additional manual findings using NVDA screen reader

1. **SC 1.3.1 A** – Group Related Form Elements – Filter checkboxes are not programmatically associated with the visible group labels. Group labels are needed to completely understand the use of the checkboxes.
2. **SC 2.4.6 AA** – Descriptive Labels – Multiple "more" buttons that open additional content for specific articles. Accessible text should be specific to the button use. EX: arial-label="More about Transcriptional regulation…"

3. Article Details

Source: https://offcampus.lib.washington.edu/login?url=http://www.microbiologyresearch.org
Test case: Click on the title "Engineering the PduT shell protein to modify the permeability of the 1,2-propanediol microcompartment of Salmonella" Test the article page including the Info, Sections, Side by side view, PDF, Tools, and Share options in the menu bar at the top of the article full-text and in a floating menu bar.

Automated findings using Axe

2. **SC 1.4.3 AA** – Color Contrast – Green "Salmonella" text on gray background has insufficient color contrast of 4.3 (foreground color: #008000, background color: #ebebeb. Expected contrast ratio of 4.5:1
3. **SC 1.4.3 AA** – Color Contrast – Gray Author, Publication, and date text on white background in right column has insufficient color contrast of 2.21 (foreground color: #a2b1b6, background color: #ffffff, font size: 9.8pt (13px), font weight: normal). Expected contrast ratio of 4.5:1
4. **SC 1.4.3 AA** – Color Contrast – Gray "Powered by" text on white background in right column SC 1.4.3 AA - Color Contrast - Gray Author, Publication, and date text on white background in right column has insufficient color contrast of 2.21 (foreground color: #a2b1b6, background color: #ffffff, font size: 9.8pt (13px), font weight: normal). Expected contrast ratio of 4.5:1
5. **SC 2.4.1 A** – Titles on Frames – Iframes for youtube videos are missing title attribute
6. **SC 2.4.6 AA** – Descriptive Labels – Multiple "view article" buttons that link to different articles. Accessible text should be specific to the link destination. EX: arial-label="View Article Encapsulation as a strategy…"
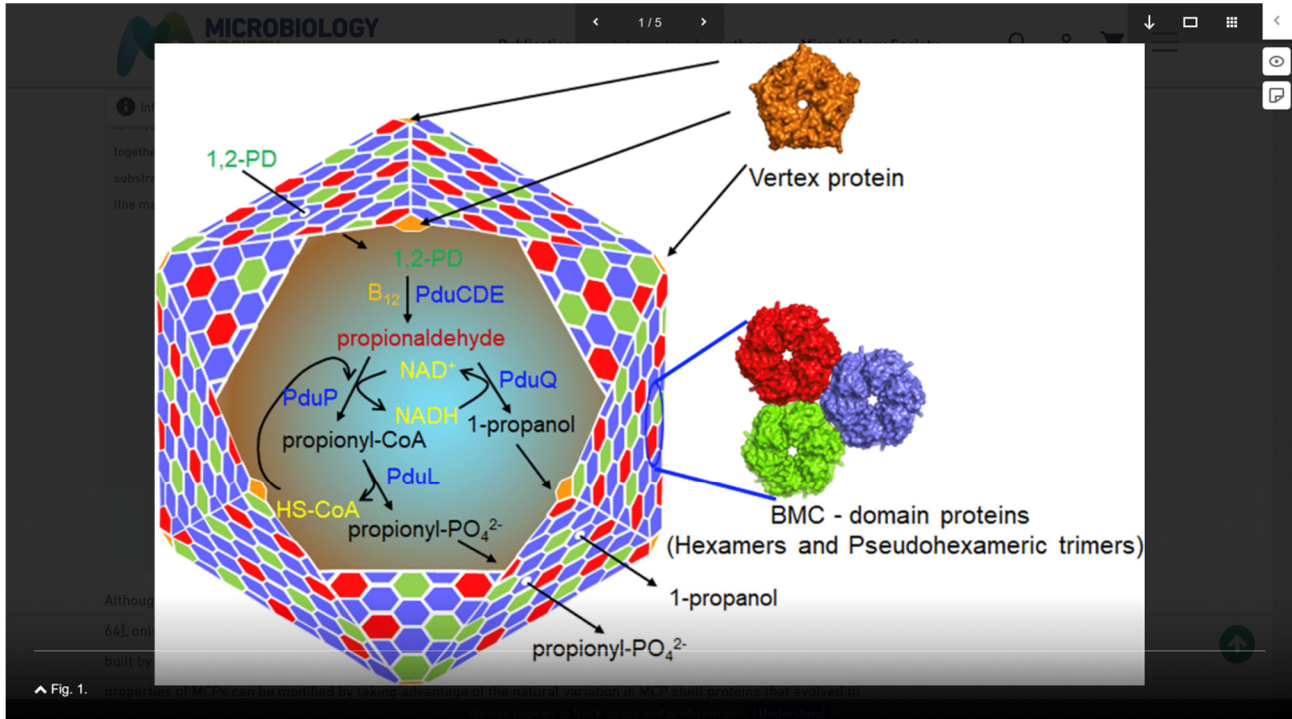
Additional manual findings using NVDA screen reader
Not completed due to insufficient time.

4. Fig. 1

Source: https://offcampus.lib.washington.edu/login?url=http://www.microbiologyresearch.org
Test case: Scroll down to "Fig. 1" and test the Click to view option.

Automated findings using Axe

1. **SC 1.1.1 A** – Images in slides need alternative text. Screen reader users don't get any information from the slides.

Additional manual findings using NVDA screen reader
Not completed due to insufficient time.