VPAT Accessibility Conformance Report

(Based on ITI VPAT©)

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| **Name of Product** | ***Netter Atlas of Human Anatomy, 8th Edition***(via netterreference.com) |
| **Date Last Updated** | **March 4, 2024** |
| Completed by | Nicholas Seow (Digital Accessibility Team) |
| **Applicable Standards/Guidelines** | This document rates *Netter Atlas of Human Anatomy, 8th Edition* (via netterreference.com) according to the W3C WCAG 2.1 A and AA requirements.  |
| **Contact for More Information** | Elsevier Digital Accessibility Teamaccessibility@elsevier.com |
| **Testing Tools and Methods** | * **Hands-on keyboard operation**
* **DevTools/Code inspection**
* **Mozilla Firefox 123 and Chrome 122 on Windows 11 22H2**
* **NVDA screen reader 2023.3**
* **WAVE Browser Extension**
* **Color Contrast Analyzer**
* [W3C Web Accessibility Initiative (WAI) Pages](https://www.w3.org/WAI/)
* [Elsevier Accessibility Checklist](http://romeo.elsevier.com/accessibility_checklist/)
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| **Document Sections** | This review document includes all WCAG 2.1 A and AA checkpoints, organized into 7 logical sections: * Visuals
* Keyboard
* Headings and Structure
* Labeling
* Multimedia
* Usability
* Mobile User Experience
 |
| **Pages Covered** | Landing page, Plate, Region, Systems, Videos & More, My Atlas, Notes, Bookmarks, Search results, Manage Lightbox, 3D Models |
| **Terms** | * **Supports: The functionality of the product has at least one method that meets the criteria without known defects or meets with equivalent facilitation.**
* **Partially supports: Some functionality of the product does not meet the criteria.**
* **Does not support: Majority of functionality of the product does not meet the criteria.**
* **Supports (N/A): According to W3C on conformance, "If there is no content to which a success criterion applies, the success criterion is satisfied."**
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| **Notes/Terminology** | * **“AT” stands for Assistive Technology such as screen readers, voice input, etc.**
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## Conformance Summary

| **WCAG 2.1 Success Criterion**  | **Level** | **Evaluation** |
| --- | --- | --- |
| 1.1.1: Non-text Content | A | Partially supports |
| 1.2.1: Audio-only and Video-only (Prerecorded) | A | Supports (N/A) |
| 1.2.2: Captions (Prerecorded) | A | Does not support |
| 1.2.3: Audio Description or Full Text Alternative | A | Does not support |
| 1.2.4: Captions (Live) | AA | Supports (N/A) |
| 1.2.5: Audio Description | AA | Does not support |
| 1.3.1: Info and Relationships | A | Partially supports |
| 1.3.2: Meaningful Sequence | A | Partially supports |
| 1.3.3: Sensory Characteristics | A | Supports |
| 1.3.4: Orientation (2.1) | AA | Supports |
| 1.3.5: Identify Input Purpose (2.1) | AA | Supports (N/A) |
| 1.4.1: Use of Color | A | Partially supports |
| 1.4.2: Audio Control | A | Supports (N/A) |
| 1.4.3: Contrast (Minimum) | AA | Partially supports |
| 1.4.4: Resize text | AA | Partially supports |
| 1.4.5: Images of Text | AA | Partially supports |
| 1.4.10: Reflow (2.1) | AA | Partially supports |
| 1.4.11: Non-Text Contrast (2.1) | AA | Partially supports |
| 1.4.12: Text Spacing (2.1) | AA | Supports |
| 1.4.13: Content on Hover or Focus (2.1) | AA | Supports (N/A) |
| 2.1.1: Keyboard | A | Partially supports |
| 2.1.2: No Keyboard Trap | A | Supports |
| 2.1.4: Character Key Shortcuts (2.1) | A | Supports (N/A) |
| 2.2.1: Timing Adjustable | A | Supports |
| 2.2.2: Pause, Stop, Hide | A | Supports (N/A) |
| 2.3.1: Three Flashes or Below Threshold | A | Supports (N/A) |
| 2.4.1: Bypass Blocks | A | Partially supports |
| 2.4.2: Page Titled | A | Does not support |
| 2.4.3: Focus Order | A | Partially supports |
| 2.4.4: Link Purpose (In Context) | A | Partially supports |
| 2.4.5: Multiple Ways | AA | Supports |
| 2.4.6: Headings and Labels | AA | Partially supports |
| 2.4.7: Focus Visible | AA | Partially supports |
| 2.5.1: Pointer Gestures (2.1) | A | Supports (N/A) |
| 2.5.2: Pointer Cancellation (2.1) | A | Supports |
| 2.5.3: Label in Name (2.1) | A | Partially supports |
| 2.5.4: Motion Actuation (2.1) | A | Supports (N/A) |
| 3.1.1: Language of Page | A | Supports |
| 3.1.2: Language of Parts | AA | Supports (N/A) |
| 3.2.1: On Focus | A | Supports |
| 3.2.2: On Input | A | Supports |
| 3.2.3: Consistent Navigation | AA | Supports |
| 3.2.4: Consistent Identification | AA | Supports |
| 3.3.1: Error Identification | A | Supports |
| 3.3.2: Labels or Instructions | A | Partially supports |
| 3.3.3: Error Suggestion | AA | Supports |
| 3.3.4: Error Prevention (Legal, Financial, Data) | AA | Supports (N/A) |
| 4.1.1: Parsing | A | Supports |
| 4.1.2: Name, Role, Value | A | Partially supports |
| 4.1.3: Status Messages (2.1) | AA | Does not support |

## WCAG 2.1 A and AA Success Criteria

### Visuals

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| **WCAG 2.1****Checkpoint** | **Conformance Level** | **Remarks** |
| [1.1.1: Non-Text Content](https://www.w3.org/TR/WCAG21/#non-text-content) (A)Provide text alternatives for non-text content (e.g. images) | Partially supports | Many images and icons have appropriate text equivalents – however some key non-text content (e.g. illustrated plates) may lack adequate text alternatives.**Exceptions:*** Plate: Image – Plate image content lacks appropriate text alternative equivalents in general. The aggregate <svg> element lacks an accessible name or description. The base plate illustration lacks text description, programmatically associated or otherwise. Component diagram labels for anatomical features (when activated) may be programmatically available, but only as generic <text> elements within the <svg> despite their arrangement and interactivity; other potentially meaningful overlay graphics such as lines and pins implemented via <svg> child elements may lack text alternatives.
* Videos & More: Tables – Tabular content (that is linked to and opens in a new window) is presented via images of text, with no equivalent text/other alternative available. Short descriptive identification in text precedes the image elements, which typically lack alt attributes.
* Videos & More: Videos – Links to audiovisual content (media player opens in a new window) are appropriately labelled/described, yet only some videos have descriptive text preceding the media player in the new window – in the context of the new window, the media content may lack any descriptive identification
* 3D Models: 3D Views – 3D View content lacks appropriate text alternative equivalents in general. The base 3D rendered image lacks alt text or any other text description, programmatically associated or otherwise. Component diagram labels for anatomical features (when activated) may be programmatically available as generic text or button labels; other potentially meaningful overlay graphics such as lines lack text alternatives.
* Manage Lightbox: Lightbox images – Images lack a descriptive text alternative – image elements have null alt text and ambiguous "Drag and Drop..." title attributes
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| [1.3.3: Sensory Characteristics](https://www.w3.org/TR/WCAG21/#sensory-characteristics) (A)Do not rely on sensory characteristics of components such as shape, size, visual location, orientation, or sound | Supports | There are no instructions or areas of content which rely solely on sensory characteristics. |
| [1.4.1: Use of Color](https://www.w3.org/TR/WCAG21/#use-of-color) (A)Color is not used as the only visual means of conveying info | Partially supports | In most instances, when color is used as a means of conveying information, another visual method is also used to convey the information without color.**Exceptions:*** Landing page: Inline links – Links are only distinguished from paragraph text via a different color.
* Region, Systems: Pagination – Element indicating current page is only distinguished from other elements within the paginator via a difference in color (yellow/black vs. white/blue)
* 3D Models: Active Label navigation – Current item within side navigation menu is only distinguished from other elements via a difference in color (yellow vs. white) – only other indication of current context is generic text in another page region
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| [1.4.3: Color Contrast (Minimum)](https://www.w3.org/TR/WCAG21/#contrast-minimum) (AA)Text has enough contrast with the background (4.5:1 for small text and 3:1 for large text) | Partially supports | Text has sufficient contrast with its corresponding background in most areas.**Exceptions:*** Plate: Lightbox instructions/links – Text (blue) and link text (orange) lack sufficient contrast against the background
* Plate: Left menu items – During pointer hover, component labels (gold) lack sufficient contrast against the background (white)
* Plate: Back button – During pointer hover, component label (orange) lacks sufficient contrast against the background (white)
* Notes: Selected Note – Title and category of selected Note (gold) lacks sufficient contrast against the selection background (light grey)
* Notes: Selected Category – Selected Category (white) lacks sufficient contrast against the selection background (gold)
* Search results: Sort order links – Text label of selected sort order component e.g. "123" (gold) lacks sufficient contrast against the background (light grey)
* Videos & More: Section headings – Heading text (gold) lacks sufficient contrast against the background (white)
* 3D Models: Diagram label text – Text (white) may lack sufficient contrast against button backgrounds (various colors) during pointer hover states
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| [1.4.4: Resize Text](https://www.w3.org/TR/WCAG21/#resize-text) (AA)Text can be enlarged up to 200% without loss of functionality. | Partially supports | Text may be enlarged to 200% while preserving functionality of content in most instances. Note: diagram label text within interactive Plate image is not subject to browser text zoom settings.**Exceptions:*** All pages: Main navigation, main heading – Navigation link and heading text may overlap or be partially obscured at 200% text zoom
* Plate: Left menu – Component labels may overlap one another or be partially obscured at 200% text zoom
* Region, Systems: Pagination – Second set of pagination links is partially truncated/obscured at 200% text zoom
* 3D Models: Page content – Diagram labels may overlap one another or be partially obscured at 200% text zoom; navigation menu items may also be clipped or obscured
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| [1.4.5: Images of Text](https://www.w3.org/TR/WCAG21/#images-of-text) (AA)Text is used rather than images of text, except where the presentation of text is essential, such as logos | Partially supports | No images of text are used other than for logos or essential presentation in most areas.**Exceptions:*** Landing page: "Browse by…" links – Text labels of certain link elements, e.g. "Browse by Region", are only represented via images
* Videos & More: "More…" links – Link labels, e.g. "More Plates", are implemented as images of text
* Videos & More: Tables – Tabular content (that is linked to and opens in a new window) is presented via images of text – images of entire tables – with no equivalent text/other alternative available.
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| [1.4.10: Reflow](https://www.w3.org/TR/WCAG21/#reflow)(AA)Content can be presented without loss of information or functionality, and without requiring scrolling in two dimensions for:Vertical scrolling content at a width equivalent to 320 CSS pixels;Horizontal scrolling content at a height equivalent to 256 CSS pixels. | Partially supports | Most pages utilize a responsive view where content reflows into a single column. In most instances page may be zoomed to 400% without necessitating horizontal scrolling, nor loss of functionality/content. Note: interactive Plate image (with label text, etc.) requires the two-dimensional layout to preserve meaning, and does not reflow; scrolling at high zoom levels may be necessary as the Plate image is subject to browser zoom settings and not constrained to the viewport.**Exceptions:*** Notes: Edit Note modal – Modal dialog does not reflow; labels and controls may not be visible/usable at very high zoom states
* 3D Models: Page content – With the exception of content within the 3D viewer, page layout adjusts to keep content within the viewport at higher zoom levels – however only to a certain extent. At very high zoom levels, some content such as horizontally-arranged navigation items may exceed the viewport bounds.
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| [1.4.11: Non-Text Contrast](https://www.w3.org/TR/WCAG21/#non-text-contrast) (AA)User interact components and graphical objects have a contrast ratio of at least 3:1 against adjacent color(s). | Partially supports | Almost all non-text UI components and graphical objects have at least a 3:1 contrast ratio. Note: on interactive Plate image, portions of red pin may lack strong contrast against image content in the immediate background – although there is, by default, a black/blue connecting line leading to the pin, and an additional pointer hover interaction that changes the pin shape for greater visual prominence.**Exceptions:*** Plate: Lightbox modal close 'x' button – Component label 'x' (orange), if taken to be a graphic icon, lacks sufficient contrast against the background (light grey)
* Notes: Selected Category focus indicator – Focus indicator, a white dashed line, lacks sufficient contrast against the background (gold)
* 3D Models: Diagram lines – Lines (white) connecting diagram labels to 3D representation may lack sufficient contrast against the indicated anatomical feature at close to the point of termination
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| [1.4.12: Text Spacing](https://www.w3.org/TR/WCAG21/#text-spacing) (AA)In content implemented using markup languages that support the following text style properties, no loss of content or functionality occurs by setting all the following and by changing no other style property:Line height (line spacing) to at least 1.5 times the font size;Spacing following paragraphs to at least 2 times the font size;Letter spacing (tracking) to at least 0.12 times the font size;Word spacing to at least 0.16 times the font size. | Supports | Users may adjust the text spacing of content on pages to the minimum baseline properties without causing loss of content or functionality. |
| [1.4.13: Content on Hover or Focus](https://www.w3.org/TR/WCAG21/#content-on-hover-or-focus) (AA)Where receiving and then removing pointer hover or keyboard focus triggers additional content to become visible and then hidden, the following are true:* Dismissable
* Hoverable
* Persistent
 | Supports (N/A) | No applicable instances of content that may appear on hover or focus. |
| [2.3.1: Three Flashes or Below Threshold](https://www.w3.org/TR/WCAG21/#three-flashes-or-below-threshold) (A)No more than three flashes in a 1-second period, or the flashes are below the defined thresholds | Supports (N/A) | No flashing content exists. |

### Keyboard

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| **WCAG 2.1****Checkpoint** | **Conformance Level** | **Remarks** |
| [1.3.2: Meaningful Sequence](https://www.w3.org/TR/WCAG21/#meaningfuusequence) (A)The correct reading sequence can be programmatically determined | Partially supports | The correct reading sequence is typically logical, with the DOM order according with the visual order in most areas.**Exceptions:*** Plate: Image diagram labels – A programmatically determinable, non-linear reading sequence of diagram labels may be present when the labels are enabled – however, important elements such as interactive menus for label visibility options (when activated) are inserted incorrectly/illogically within the reading sequence, and may be disorienting for AT users.
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| [2.1.1: Keyboard](https://www.w3.org/TR/WCAG21/#keyboard) (A)All functionality is available from a keyboard, except for tasks such as drawing | Partially supports | A substantial portion of standard web page content and functionality is keyboard operable across pages, although significant exceptions render the interactivity of Plate images and several other areas inoperable via keyboard.**Exceptions**:* Plate: Left menu items – Several interactive components are not keyboard operable – e.g. the "Show Label & Pin", "Show Group Label", or "Notes" accordions, or the "Highlight" toggle and further interactivity
* Plate: Image – Interactive components (diagram labels) on the image are not typically keyboard focusable/operable – although they may be readable or operable to a limited extent by AT using the keyboard modality
* Notes: Edit Note modal Close button – Component – an <a> element without href target – is not keyboard focusable
* Notes: Edit Note modal buttons – "Update" and "Cancel" buttons are not keyboard operable as they cannot receive focus (see related exception under SC 2.4.3); submitting the form presented within the modal is not possible via keyboard, although modal may be dismissed with Esc key
* 3D Models: 3D Views – Neither zoom/pan (via control components) nor 3D rotation (via dragging movements) are keyboard operable in their discrete views
* Manage Lightbox: Lightbox – Order of Lightbox items may only be rearranged via pointer dragging movements, with no facility to set arrangement via keyboard
* Manage Lightbox: Slideshow – Slideshow controls are not keyboard operable
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| [2.1.2: No Keyboard Trap](https://www.w3.org/TR/WCAG21/#no-keyboard-trap) (A)The user can use the keyboard to move through page elements and is not trapped on a particular element | Supports | No pages have a keyboard trap. |
| [2.1.4: Character Key Shortcuts](https://www.w3.org/TR/WCAG21/#character-key-shortcuts) (A)If a keyboard shortcut is implemented in content using only letter (including upper- and lower-case letters), punctuation, number, or symbol characters, then at least one of the following is true:* Turn off
* Remap
* Active only on focus
 | Supports (N/A) | The site does not use any character key shortcuts. |
| [2.4.3: Focus Order](https://www.w3.org/TR/WCAG21/#focus-order) (A)Users can tab through the elements of a page in a logical order | Partially supports | Tab order is largely logical across the site and preserves the meaning and operability of content in most instances.**Exceptions:*** Plate: Lightbox modal – Container lacks proper focus management: while focus proceeds to the container after activation, focus is not trapped inside while it is activated
* Notes: Edit Note modal buttons – Focus is trapped within the three input fields while modal is activated – users cannot reach the "Update" and "Cancel" buttons via tabbing
* 3D Models: Active Label – "Back to Home View" button is the first element within the tab order despite being visually situated below the side navigation menu. Focus is reset whenever a navigation item is activated; users will encounter "Back to Home View" before being able to the reach the navigation or main content.
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| [2.4.7: Focus Visible](https://www.w3.org/TR/WCAG21/#focus-visible) (AA)The page element with the current keyboard focus has a visible focus indicator | Partially supports | Almost all elements across the site have a decent visible indication of focus – the focus indicator is typically a prominent dashed outline.**Exceptions:*** Manage Lightbox: View Lightbox accordion items – Set of available Lightbox links lack visible indications of keyboard focus
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| [3.2.1: On Focus](https://www.w3.org/TR/WCAG21/#on-focus) (A)When a UI component receives focus, this does not trigger unexpected actions. | Supports | Focusable elements do not cause unexpected actions/changes of context when receiving focus. |

### Headings and Structure

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| **WCAG 2.1****Checkpoint** | **Conformance Level** | **Remarks** |
| [1.3.1: Information and Relationships](https://www.w3.org/TR/WCAG21/#info-and-relationships) (A)Info, structure, and relationships can be programmatically determined | Partially supports | Some content is distinguishable via semantic structure and relationships: list markup is used appropriately in some instances, many input elements have programmatically determinable labels, and HTML sectioning elements/landmark roles are implemented for several content regions. Headings are programmatically determinable on some pages, although several pages lack a first heading or have other deficiencies in logical heading order.**Exceptions:*** All pages: Headings – Lack of appropriate semantic heading markup in several areas, where sections of content may be organized under visually-differentiated headings
* All pages: Main heading – Pages generally lack a programmatically determinable first heading level. An <h1> element is hidden via CSS display:none, and the main content heading on each page is visually apparent yet is not defined as <h1>.
* All pages: Page structure – On many pages, <main> landmark encapsulates all other regions – e.g. <header>, <footer>, etc. – rather than designating main content area
* Plate: Lightbox modal inputs – Inputs lack programmatically determinable labels: adjacent text labels are not associated with the input
* Plate: Left menu – Component labels are implemented as <h3> elements, potentially only for presentational effect
* Plate: Left menu items – Related checkbox inputs are not grouped (along with appropriate group label), although the set is organized via list markup
* Region, Systems, Videos & More, My Atlas: Secondary navigation – Sets of secondary navigation links (i.e. left navigation for categories, pagination) may lack list markup and are not contained within navigation landmarks
* Videos & More: Section headings – Multiple <h1> elements (corresponding to headings for content sections) are present on the page
* 3D Models: "Labels On" toggle – Button lacks an accessible name as it is not programmatically associated with the adjacent text label
* 3D Models: "Back to Home View" button – Button lacks an accessible name as it is not programmatically associated with the adjacent text label (its image lacks an alt attribute)
* 3D Models: Page structure – Pages lack semantic markup for regions and content: a <section> element encapsulates all content, including two <header> elements that do not function as banner landmarks; neither headings nor lists, while sparse, are programmatically determinable
* Manage Lightbox: View Lightbox accordion items – Set of available Lightbox links are not organized via list markup
* Manage Lightbox: Delete Lightboxes – Set of checkbox inputs lack programmatically determinable labels (adjacent text label are not associated), are not appropriately grouped
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| [2.4.1: Bypass Blocks](https://www.w3.org/TR/WCAG21/#bypass-blocks) (A)Users can bypass repeated blocks of content. | Partially supports | Several landmarks are defined on many pages (although see caveat under Exceptions). Headings somewhat thinly distributed, which makes it inconvenient for AT users seeking to jump to different areas of content quickly. **Exceptions:*** Pages lack skip links to main content (or other significant sections). On many pages, <main> landmark encapsulates all other regions; sets of secondary navigation links may not be contained within landmarks
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| [2.4.6: Headings and Labels](https://www.w3.org/TR/WCAG21/#headings-and-labels) (AA) Headings and labels are clear and consistent. | Partially supports | Headings are present in some areas to help distinguish content, although the general heading structure is somewhat sparse.**Exceptions:*** All pages: Headings – Pages may lack descriptive main headings, or descriptive headings for logical areas of content
 |
| [3.1.1: Language of Page](https://www.w3.org/TR/WCAG21/#language-of-page) (A)The language of the page is specified | Supports | The default page language is typically and appropriately defined as lang="en".  |
| [3.1.2: Language of Parts](https://www.w3.org/TR/WCAG21/#language-of-parts) (AA)Specify the language of text passages that are in a different language than the default language of the page. | Supports (N/A) | There are no sections of text that do not match the default language of the page. |
| [4.1.1: Parsing](https://www.w3.org/TR/WCAG21/#parsing) (A)Use valid, error-free HTML | Supports | All pages use and error-free HTML; HTML and CSS typically pass concerning these 4 specific criteria: 1. elements have complete start and end tags,
2. elements are nested according to their specifications
3. elements do not contain duplicate attributes
4. any IDs are unique, except where the specifications allow these features.

Note: There may be other general HTML validation errors outside the scope of this criterion. |

### Labeling

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| **WCAG 2.1****Checkpoint** | **Conformance Level** | **Remarks** |
| [1.3.5: Identify Input Purpose](https://www.w3.org/TR/WCAG21/#identify-input-purpose) (AA)The purpose of each input field collecting information about the user can be programmatically determined when:The input field serves a purpose identified in the Input Purposes for User Interface Components section; and the content is implemented using technologies with support for identifying the expected meaning for form input data. | Supports (N/A) | No applicable form elements that collect such information about the user are present. |
| [2.4.2: Page Titled](https://www.w3.org/TR/WCAG21/#page-titled) (A)The page has a title describing its topic or purpose | Does not support | A descriptive page title that identifies content/purpose is not present for most pages: "Netter Atlas-8e" is defined generically as the page title across many pages |
| [2.4.4: Link Purpose (In Context)](https://www.w3.org/TR/WCAG21/#link-purpose-in-context) (A)The purpose of each link can be determined from the link text or surrounding context. | Partially supports | An identifiable purpose may be deduced for almost all links from the link text or surrounding context.**Exceptions:*** Search results: Sort order links – Sort order components have ambiguous text labels ("ABC"/"123") that are not descriptive of link purpose, i.e. to each conduct a search with a specific sort parameter. The links' practical analogy as a toggle/switch controlling the order of search results may be somewhat inferred from visual context, but is not programmatically determinable.
* Manage Lightbox: Lightbox images "Enlarge" links – Links are not sufficiently distinguishable by text label (multiple instances of "Enlarge >") or context (e.g. adjacent image content lacks alt text) – and do not indicate that destination opens in a new window
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| [2.5.3: Label in Name](https://www.w3.org/TR/WCAG21/#label-in-name) (A)For user interface components with labels that include text or images of text, the name contains the text that is presented visually. | Partially supports | Most user interface components that have visible text contain that text consistently within the accessible name.**Exceptions:*** Plate: Left menu items – Components may have aria-label attributes that inappropriately override visible text labels as accessible names – e.g. "Show Label & Pin" is erroneously imposed on "Show Group Label"
* Region, Systems: Left navigation – Several links bear accessible names (via aria-label attributes) that do not contain or insufficiently match the visible label text, e.g. "Skeletal" vs. "Introduction"
* Videos & More: "More…" links – Accessible names of links (via aria-label attributes) contain further contextual detail than their visible labels (available via images of text) – however the visible label text may have words interspersed within the longer accessible names, e.g. "More Videos" vs. "More Sample Videos from Netter's Online Dissection Modules Videos", or may otherwise be erroneous
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| [3.2.4: Consistent Identification](https://www.w3.org/TR/WCAG21/#consistent-identification) (AA)UI components used across the web site are identified consistently on every page. | Supports | Components are typically consistent across the site, and identified consistently where they perform the same function across pages. Note: Links to items (individual Plate pages, etc.) in Search result pages are substantially the same yet more verbose than the same in Regions, Systems, Videos & more; Search result list items each contain the paired set of image (with alt text) and adjacent text within a single link element, while list items on other pages only hyperlink the image. |
| [3.3.1: Error Identification](https://www.w3.org/TR/WCAG21/#error-identification) (A)Input errors are clearly marked and described to the user. | Supports | Input errors – or opportunities for error identification – are very uncommonly encountered. Where present, errors are typically identified and presented well visually. For instance, an invalid (null) selection while attempting to Delete Lightboxes in Manage Lightbox is validated upon form submission, and results in an error message presented in dark red text above the affected form. Error states are, however, not typically programmatically communicated to AT, nor is focus management used for convenient error indication. |
| [3.3.2: Labels or Instructions](https://www.w3.org/TR/WCAG21/#labels-or-instructions) (A)Items requiring user input are clearly labeled or have clear instructions. | Partially supports | Labels or instructions are provided for most form elements, most of which are programmatically associated with their inputs. Note: see SC 1.3.1 for exceptions where visible labels may not be programmatically associated with inputs.**Exceptions:** * All pages: "Enter Keyword" search field – Visible text label, implemented only via placeholder, is not available while input receives focus; placeholder text may also be ambiguous and is truncated from the more descriptive accessible name of the input (via aria-label attribute), "Enter Keyword for Search"
 |
| [3.3.3: Error Suggestion](https://www.w3.org/TR/WCAG21/#error-suggestion) (AA)When the user makes an input error, give suggestions for valid input. | Supports | Input errors – or opportunities for error suggestion – are very uncommonly encountered. For instance, an invalid (null) selection while attempting to Delete Lightboxes in Manage Lightbox is validated upon form submission, and results in an error message presented in dark red text above the affected form. While terse, the user is appropriately advised by the message to select at least one item for deletion. |
| [4.1.2: Name, Role, Value](https://www.w3.org/TR/WCAG21/#name-role-value) (A)For all UI components, the name, value, and role can be programmatically determined. | Partially supports | Some UI components communicate their state programmatically, and many have accessible names that are appropriately defined. Several ARIA attributes and roles are not present where appropriate.**Exceptions:*** Component lacks an appropriate accessible name (e.g. "Close" rather than "x"), and is implemented as a link rather than a <button>
* Container lacks dialog role and aria-modal="true" attributes
* Components are implemented as a series of <a> link and nested <h3> heading elements, rather than <button> elements with appropriate roles and states – several components have accordion-esque interactivity that is not programmatically communicated to AT, and components are collectively more akin to menuitems within a menubar
* Constituent components of the <svg> may lack accessible names or appropriate semantic roles – text/graphic/interactive content (even when available) may be disorienting for AT users
* Modal container lacks dialog role and aria-modal="true" attributes
* Element indicating current page is a generic <span> without a role, rather than a (disabled/inactive) <a> link with aria-current="page" attribute. The accessible name implementation via aria-label is invalid for the generic <span>, resulting in labelling inconsistency in relation to the other link elements within the paginator.
* Component activation toggles an expandable accordion panel yet is implemented via <a> link rather than <button>, and does not utilize aria-expanded attributes to communicate state
 |
| [4.1.3: Status Messages](https://www.w3.org/TR/WCAG21/#status-messages) (AA)In content implemented using markup languages, status messages can be programmatically determined through role or properties such that they can be presented to the user by assistive technologies without receiving focus. | Does not support | Status messages, while uncommonly encountered, are typically not announced by assistive technology. * Plate: Lightbox modal – Loading state and successful completion message around adding images to lightbox, presented within the same dialog, are not announced to AT
* 3D Models: Loading state – The main loading state, presented in text via "Loading 3D View..." text with increasing completion percentage, is not announced to AT. The loading state of Views, representing by a spinner animation, is also not announced to AT.
* Manage Lightbox: Delete Lightboxes – Error message when no items are selected for deletion is presented via a status message yet is not announced to AT, nor is focus management utilized for more convenient error indication
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### Multimedia

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| **WCAG 2.1****Checkpoint** | **Conformance Level** | **Remarks** |
| [1.2.1: Audio-only or Video-only (Prerecorded)](https://www.w3.org/TR/WCAG21/#audio-only-and-video-only-prerecorded) (A)Provide alternatives for pre-recorded audio-only or video-only content. | Supports (N/A) | There is no pre-recorded audio-only or video-only content. |
| [1.2.2: Captions (Prerecorded)](https://www.w3.org/TR/WCAG21/#captions-prerecorded) (A)Provide captions for pre-recorded audio | Does not support | No captions are provided for supplementary audiovisual content available via "Videos & More". |
| [1.2.3: Audio Description or Media Alternative (Prerecorded)](https://www.w3.org/TR/WCAG21/#audio-description-or-media-alternative-prerecorded) (A)Provide alternatives for pre-recorded synchronized audio/video | Does not support | Neither audio descriptions nor suitable textual alternative are provided as alternatives for video in supplementary audiovisual content available via "Videos & More". |
| [1.2.4: Captions (Live)](https://www.w3.org/TR/WCAG21/#captions-live) (AA)Provide captions for live audio in synchronized audio/video. | Supports (N/A) | There is no synchronized audio/video content nor live audio. |
| [1.2.5: Audio Description (Prerecorded)](https://www.w3.org/TR/WCAG21/#audio-description-prerecorded) (AA)Provide an audio description of pre-recorded video. | Does not support | No audio descriptions are provided for video in supplementary audiovisual content available via "Videos & More". |
| [1.4.2: Audio Control](https://www.w3.org/TR/WCAG21/#audio-control) (A)Audio can be paused and stopped, or the audio volume can be changed. | Supports (N/A) | No pages feature audio that plays automatically.  |
| [2.2.2: Pause, Stop, Hide](https://www.w3.org/TR/WCAG21/#pause-stop-hide) (A)Users can stop, pause, or hide moving, blinking, scrolling, or auto-updating information. | Supports (N/A) | There is no moving, scrolling, or auto-updating information for which the criterion is applicable. Note: on Plate page, a very brief (<5 second) animation extending connecting lines from diagram labels to pins on plate illustrations may initiate upon page load. |

### Usability

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| **WCAG 2.1****Checkpoint** | **Conformance Level** | **Remarks** |
| [2.2.1: Timing Adjustable](https://www.w3.org/TR/WCAG21/#pause-stop-hide) (A)Users are warned of time limits shorter than 20 hours and time limits can be turned off or extended | Supports | A session timeout exists under certain circumstances. Occasionally, after a period of inactivity (>25 minutes), a dialog is presented to advise the user that they may avoid the timeout and extend the session via activating an "OK" button. The message in the dialog warns that further inactivity of "5 minutes" shall result in the user being logged out automatically. |
| [2.4.5: Multiple Ways](https://www.w3.org/TR/WCAG21/#multiple-ways) (AA)More than one way is available to navigate to other web pages. | Supports | While there is no sitemap or other comprehensive index of pages, pages (except steps/results of a process) may typically be located and accessed in multiple ways. Pages for interactive Plate images and other supplementary content (videos, 3D Models, etc.) may be reached via search functionality or the Regions, Systems, Videos & More index pages. Plate pages may additionally be saved by users, in lists, via Notes or Bookmarks for future access/reference.  |
| [3.2.2: On Input](https://www.w3.org/TR/WCAG21/#on-input) (A) Changing the setting of a checkbox, radio button, or other UI component does not trigger unexpected changes in context. | Supports | User input, such as changing the values of form elements, does not initiate unexpected actions or changes in context. |
| [3.2.3: Consistent Navigation](https://www.w3.org/TR/WCAG21/#consistent-navigation) (AA)Navigation menus are in the same location and order on every web page. | Supports | Navigation menus are consistent across pages. For example, global navigation links in the header are consistent across pages, occurring in the same order; secondary navigation are is consistently positioned across appropriate sets of pages. Note: Several pages containing supplementary content (e.g. 3D Models) are launched in a new window that do not feature the global navigation. |
| [3.3.4: Error Prevention (Legal, Financial, Data)](https://www.w3.org/TR/WCAG21/#error-prevention-legaufinanciaudata) (AA)For web pages with legal or financial commitments, input can be reviewed and corrected before final submission, and submissions can be reverted. | Supports (N/A) | There are no submissions which require legal or financial commitments.  |

### Mobile User Experience

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| **WCAG 2.1****Checkpoint** | **Conformance Level** | **Remarks** |
| [1.3.4: Orientation](https://www.w3.org/TR/WCAG21/#orientation)) (AA)Content does not restrict its view and operation to a single display orientation, such as portrait or landscape, unless a specific display orientation is essential. | Supports | Pages do not restrict view and operation of content to a single orientation. |
| [2.5.1: Pointer Gestures](https://www.w3.org/TR/WCAG21/#pointer-gestures) (A)All functionality that uses multipoint or path-based gestures for operation can be operated with a single pointer without a path-based gesture, unless a multipoint or path-based gesture is essential. | Supports (N/A) | Pages do not utilize or require multipoint or path-based gestures for any functionality. |
| [2.5.2: Pointer Cancellation](https://www.w3.org/TR/WCAG21/#pointer-cancellation) (A)For functionality that can be operated using a single pointer, at least one of the following is true:* No Down-Event
* Abort or Undo
* Up Reversal
* Essential
 | Supports | All interactive content functions through the Up-Event, allowing users to potentially move their pointer off the component to cancel. |
| [2.5.4: Motion Actuation](https://www.w3.org/TR/WCAG21/#motion-actuation) (A)Functionality that can be operated by device motion or user motion can also be operated by user interface components and responding to the motion can be disabled to prevent accidental actuation, except when:* Supported Interface
* Essential
 | Supports (N/A) | There is no content that utilizes device or user motion. |