Earlham Institute

Accessibility Audit for Earlham Institute

This audit involved testing a selection of pages from across the Earlham Institute website. Reports for each page were generated using accessibility evaluation tools to generate potential accessibility issues. The selected pages cover the most popular sections of the site and all major content layouts.

Summary of Findings

The Earlham Institute website is not currently fully compliant with the Web Content Accessibility Guidelines version 2.1 AA standard. The main user groups affected were screen-reader, keyboard-only and voice activation users.

There are eight site wide accessibility issues:

1. Document language missing
2. No option to skip repeated content
3. Site navigation is not highlighted on focus
4. Image links are missing alternative text
5. Search form button does not have a corresponding label
6. Empty links within the social media menus
7. Empty link for the home link in the breadcrumb navigation
8. Missing form label within the site search

All these issues are explained in more detail in the next section.

Frequently found accessibility errors were:

- missing alt attribute for the majority of images
- incorrect aria-describedby references
- low colour contrast for some text/background combinations

The majority of accessibility issues cannot be solved by website editors, so will need a developer to make alterations to the code that controls the display of the content within the site. Although this sounds like a large and expensive task to rectify, it will be made easier due to the website being constructed using a Content Management System (Drupal) and the errors being located in a small number of modules or within the CSS (stylesheet). This enables a developer to make single changes to code or CSS which will in turn affect multiple pages across the website.

Audit results

The following sections contains issues that occur within the site header or footer sections throughout the website. They are listed separately to avoid having to repeat the issues in the results for each individual page.

SITEWIDE ISSUES

DOCUMENT ISSUES

1. **Document language missing.** The language of the site is not identified. Identifying the language of the page allows screen readers to read the content in the appropriate language. It also facilitates automatic translation of content. See WCAG 3.1.1

   SOLUTION: Identify the page language using the lang attribute inside the <html> tag e.g. <html lang="en-GB">

NAVIGATION RELATED ISSUES

2. **No option to skip repeated content.** A means of bypassing blocks of content that are repeated on multiple web pages must be provided, e.g. the main navigation. For keyboard and screen reader users it can be frustrating to get to the main content of a page because you have to tab through all the main navigation elements every time you visit a new page. By implementing a skip link (also known as skip to content link), those users can skip all these elements and jump right into the content. See WCAG 2.4.1

   SOLUTION: Discuss with developer means of achieving this. The "skip to content" link should be the first focusable element on the page. The link can, but doesn't have to be visible all the time for all users. If the link is visually hidden at first, it should be visible when keyboard focus moves to the link. If the link is clicked, it should move focus to the main content below the site navigation.

3. **Elements not highlighted on focus.** With keyboard navigation it is important that the focused component can be visually identified. If the focused component is not somehow highlighted, the user cannot be sure which component has focus. Make sure that user interface elements, that can receive keyboard focus (hyperlinks, form fields and buttons), are highlighted on focus. See WCAG 2.4.7

   SOLUTION: Discuss with the developer how to highlight hyperlinks, form fields and buttons on focus. Check with the developer that dropdown menu items are accessible via keyboard navigation. **If not, it is important to devise an accessible method to reach all items contained within the pulldown menus via keyboard navigation.**

4. **Image links are missing alternative text.** Earlham Institute logo in header and Athena Swan logo in footer are missing alternative text stating the purpose of the link. See WCAG 2.4.4

SOLUTION: Add appropriate alternative text that presents the content of the image and/or the function of the link.
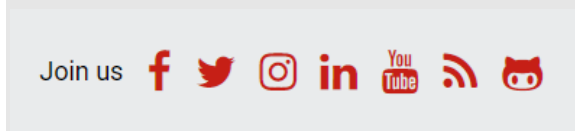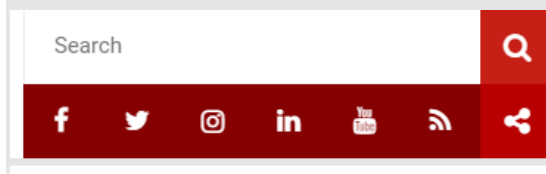
5. **Empty button.** A button is empty or has no value text (x4). When navigating to a button, descriptive text must be presented to screen reader users to indicate the function of the button. See WCAG 2.4.4

```
<button type="submit">
```

SOLUTION: Place text content within the <button> element or give the <input> element a value attribute.

6. **Empty link.** A link contains no text. These issues are within the social menu menus in the header and footer. If a link contains no text, the function or purpose of the link will not be presented to the user. This can introduce confusion for keyboard and screen reader users. This relates to the list of social media links in the header and footer of the site. See WCAG 2.4.4

Example:


```
<a class="facebook-icon" href="https://www.facebook.com/EarlhamInst/" target="_blank"></a>

<a class="twitter-icon" href="https://twitter.com/EarlhamInst" target="_blank"></a>

<a class="instagram-icon" href="https://www.instagram.com/earlhaminstitute" target="_blank"></a>

<a class="linked-in-icon" href="https://www.linkedin.com/company/earlham-institute" target="_blank"></a>

<a class="youtube-icon" href="https://www.youtube.com/channel/UCE2e4V-KXQXTZXHyJmllHfg" target="_blank"></a>

<a class="feed-icon" href="/feeds/news.rss" target="_blank"></a>
```

SOLUTION: Provide text within the link that describes the functionality and/or target of that link.

7. **Empty link.** A link contains no text. This is the HOME icon at the beginning of the breadcrumb. If a link contains no text, the function or purpose of the link will not be presented to the user. This can introduce confusion for keyboard and screen reader users. This relates to the list of social media links in the header and footer of the site. See WCAG 2.4.4

Code:

```
<a class="breadcrumb-link home-link" href="/" title="Home"><i class="fa fa-home"></a>
```

SOLUTION: Provide text within the link that describes the functionality and/or target of that link.

INPUT ASSISTANCE

8. **Missing form label.** A form control does not have a corresponding label. If a form control does not have a properly associated text label, the function or purpose of that form control may not be presented to screen reader users. Form labels also provide visible descriptions and larger clickable targets for form controls. See WCAG 3.3.2

Code:
```
<input class="form-text" placeholder="Search" type="text" id="edit-search" name="search" value="" size="60" maxlength="128">

<input class="form-text" placeholder="Search" type="text" id="edit-search" name="search" value="" size="60" maxlength="128" style="outline : red dashed 2px;">
```

SOLUTON: If a text label for a form control is visible, use the <label> element to associate it with its respective form control. If there is no visible label, either provide an associated label, add a descriptive title attribute to the form control, or reference the label(s) using aria-labelledby. Labels are not required for image, submit, reset, button, or hidden form controls.

INDIVIDUAL PAGE AUDITS

Pages selected for testing:

1. Home page – https://www.earlham.ac.uk/
2. Science Strategy - https://www.earlham.ac.uk/science-strategy
3. Organisms - https://www.earlham.ac.uk/organisms
4. Organism: Human microbiome - https://www.earlham.ac.uk/human-microbiome
5. Our People - https://www.earlham.ac.uk/our-people
6. Our People: Bernado Clavido - https://www.earlham.ac.uk/bernardo-clavijo
7. Project: Understanding the invasion of the ash dieback pathogen - https://www.earlham.ac.uk/understanding-invasion-ash-dieback-pathogen
8. About Us - https://www.earlham.ac.uk/about-us
9. Engaging with Us – https://www.earlham.ac.uk/engaging-us
10. Services: National Capabilities: Bio Foundry - https://www.earlham.ac.uk/earlham-bio-foundry
11. Newsroom - https://www.earlham.ac.uk/newsroom
12. Newsroom : DNA deck shuffled in rapid cichlid evolution - https://www.earlham.ac.uk/newsroom/dna- deck-shuffled-rapid-cichlid-evolution
13. Articles - https://www.earlham.ac.uk/articles
14. Articles: EI Innovate: A platform for collaboration and new ideas- https://www.earlham.ac.uk/articles/ei-innovate-platform-collaboration-and-new-ideas
15. Event calendar: https://www.earlham.ac.uk/events-calendar
16. Event calendar: UK Conference of Bioinformatics and Computational Biology 2020 - https://www.earlham.ac.uk/uk-conference-bioinformatics-and-computational-biology-2020

This page encountered all the issues covered by the site-wide issues section

Additional issues encountered:

9. **Missing alternative text.** Image alternative text is not present. This is occurring in the 'latest updates' section of the page. Each image must have an alt attribute. Without alternative text, the content of an image will not be available to screen reader users or when the image is unavailable. See WCAG 1.1.1
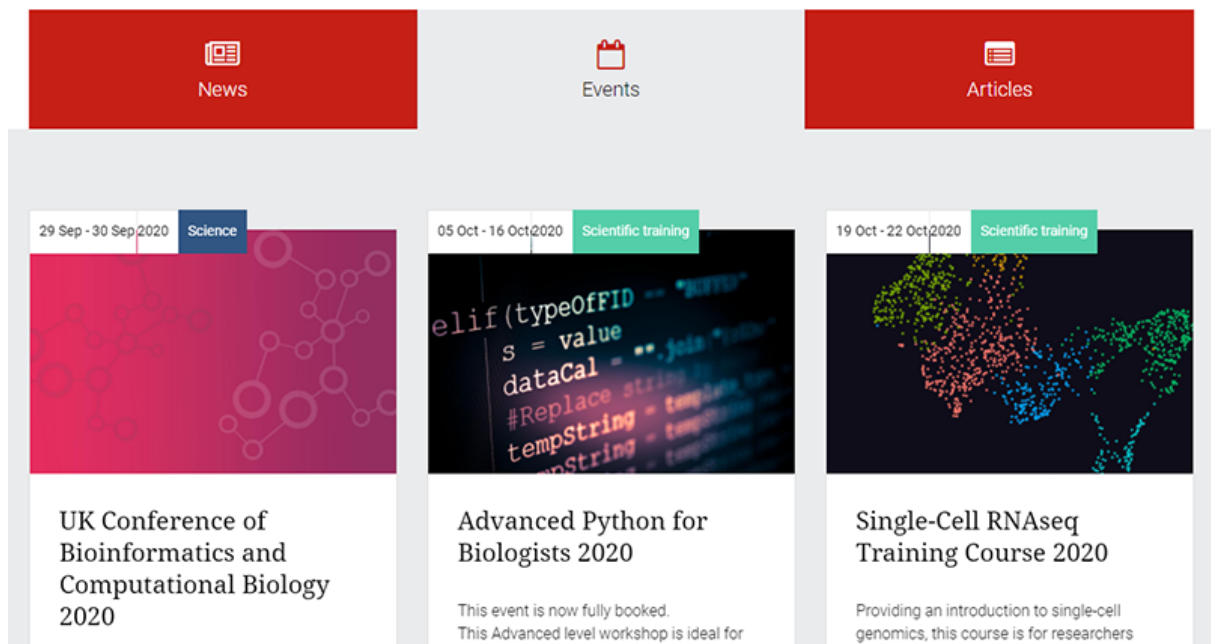

Example:
```
<img class=" image-sc-inner shortcode
loaded" src="https://www.earlham.ac.uk/sites/default/files/styles/three
_by_two/public/Falk-Hildebrand.png?itok=q-R__D2A">
```
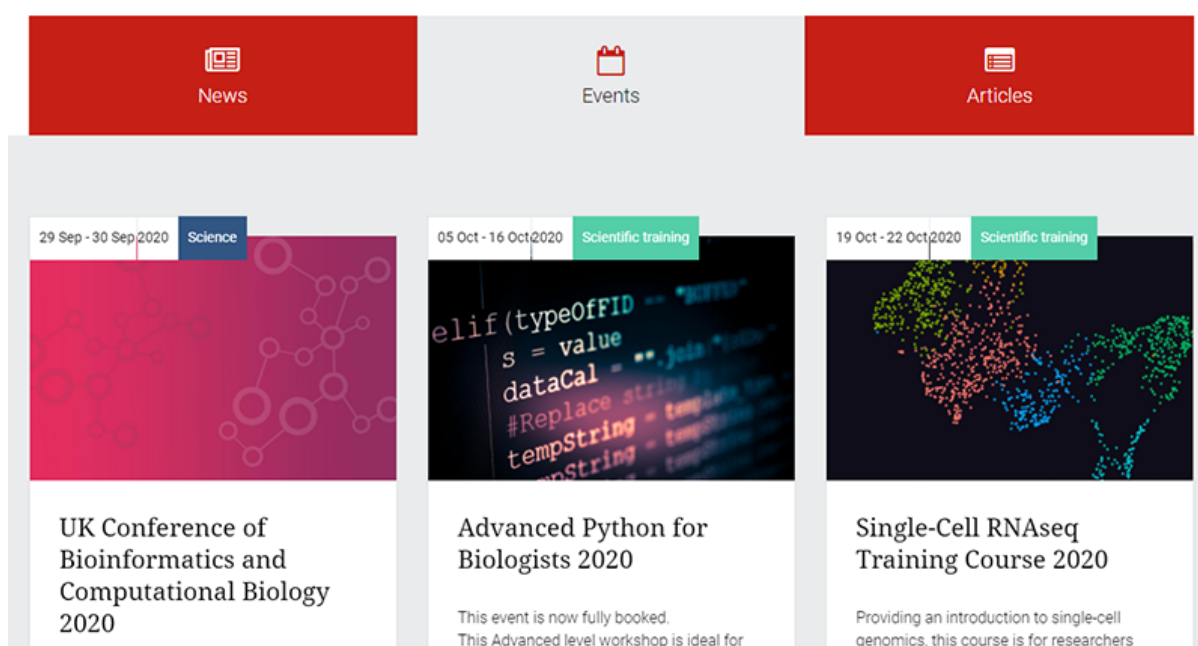
SOLUTION: Add an alt attribute to the image. The attribute value should accurately and succinctly present the content and function of the image. If the content of the image is conveyed in the context or surroundings of the image, or if the image does not convey content or have a function, it should be given empty/null alternative text (alt="").

10. **Broken ARIA reference.** aria-describedby reference exists, but the target for the reference does not exist. This is occurring in the 'latest updates' section of the page. ARIA labels and descriptions will not be presented if the element referenced does not exist in the page. See WCAG 4.1.2

Latest updates.

```
<div class="link-panel dynamic-panel col-xs-12 col-ps-12 col-sm-12 col-
md-12 col-lg-12 slick-slide slick-active" style="width:
400px;" tabindex="-1" role="option" aria-describedby="slick-
slide32" data-slick-index="2" aria-hidden="false">

div class="link-panel dynamic-panel col-xs-12 col-ps-12 col-sm-12 col-
md-12 col-lg-12 slick-slide slick-active" style="width:
0px;" tabindex="-1" role="option" aria-describedby="slick-
slide42" data-slick-index="2" aria-hidden="false">
```

SOLUTION: Ensure the element referenced in the aria-describedby attribute value is present within the page and presents a proper label or description.

11. **Contrast Errors.** Very low contrast between foreground and background colours. This applies to the "Scientific Training" tab, where the contrast ratio is only 1.95:1 which is well below the required 4.5:1 recommended ratio. Adequate contrast is necessary for all users, especially users with low vision. See WCAG 1.4.3
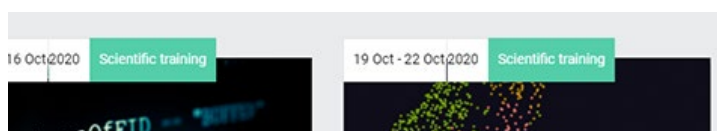
SOLUTION: Increase the contrast between the foreground (text) colour and the background colour.

This page encountered all the issues covered by the site-wide issues section

Additional issues encountered:

12. **Missing alternative text.** Image alternative text is not present. This is occurring for all images within the 'related reading' section of the page. Each image must have an alt attribute. Without alternative text, the content of an image will not be available to screen reader users or when the image is unavailable. See WCAG 1.1.1

Example:
```
<img class=" image-sc-inner shortcode"
src="https://www.earlham.ac.uk/sites/default/files/images/pages/National%20Capability%20Genomics/Technology%20pages/PromethION/promethion-nanopore.jpg">
```
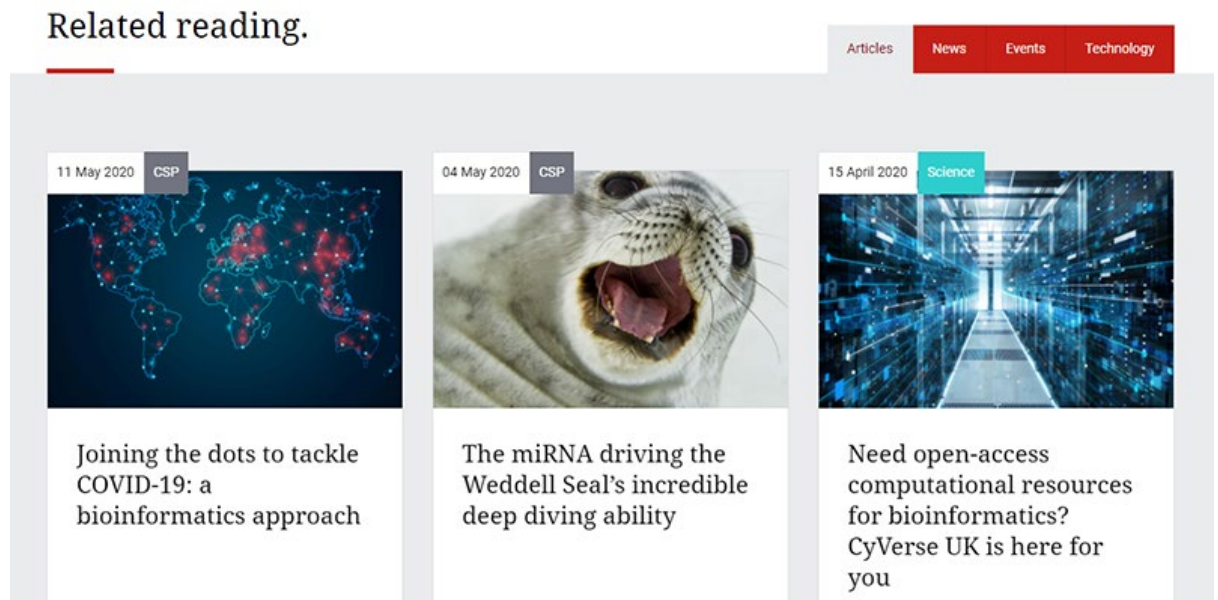
SOLUTION: Add an alt attribute to the image. The attribute value should accurately and succinctly present the content and function of the image. If the content of the image is conveyed in the context or surroundings of the image, or if the image does not convey content or have a function, it should be given empty/null alternative text (alt="").

13. **Broken ARIA reference.** aria-describedby reference exists, but the target for the reference does not exist. This is occurring in the 'Related reading' section of the page. ARIA labels and descriptions will not be presented if the element referenced does not exist in the page. See WCAG 4.1.2

Related reading.

```
<div class="link-panel dynamic-panel col-xs-12 col-ps-12 col-sm-12 col-
md-12 col-lg-12 slick-slide" style="width: 400px;" tabindex="-
1" role="option" aria-describedby="slick-slide07" data-slick-
index="7" aria-hidden="true">
```

SOLUTION: Ensure the element referenced in the aria-describedby attribute value is present within the page and presents a proper label or description.

14. **Contrast Errors.** Very low contrast between foreground and background colours. This applies to the "Science" tab within the related reading slider panel, where the contrast ratio is only 1.93:1 which is well below the required 4.5:1 recommended ratio. Adequate contrast is necessary for all users, especially users with low vision. See WCAG 1.4.3

SOLUTION: Increase the contrast between the foreground (text) colour and the background colour.

3: PAGE TESTED: HTTPS://WWW.EARLHAM.AC.UK/ORGANISMS

This page encountered all the issues covered by the site-wide issues section

Additional issues encountered:

15. **Missing alternative text.** Image alternative text is not present. This is occurring for each image within the main content section of the page. Each image must have an alt attribute. Without alternative text, the content of an image will not be available to screen reader users or when the image is unavailable. See WCAG 1.1.1

Example:

```
<img class=" image-sc-inner shortcode"
src="https://www.earlham.ac.uk/sites/default/files/styles/three_by_two/
public/African-pygmy-mouse-hero_16.jpg?itok=BYoGniSC">
```
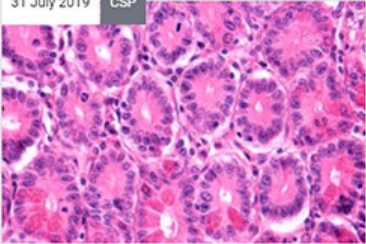
SOLUTION: Add an alt attribute to the image. The attribute value should accurately and succinctly present the content and function of the image. If the content of the image is conveyed in the context or surroundings of the image, or if the image does not convey content or have a function, it should be given empty/null alternative text (alt="").

This page encountered all the issues covered by the site-wide issues section

Additional issues encountered:

16. **Missing alternative text.** Image alternative text is not present. This is occurring for all images within the 'related reading' section of the page. Each image must have an alt attribute. Without alternative text, the content of an image will not be available to screen reader users or when the image is unavailable. See WCAG 1.1.1

Example:
```
<img class=" image-sc-inner shortcode"
src="https://www.earlham.ac.uk/sites/default/files/styles/three_by_two/
public/images/articles/Women-science-Elena-Rodriguez-gut-
microbiome/Women-science-elena-rodriguez-gut-microbiome-
hero.jpg?itok=mptQRQ5s">
```
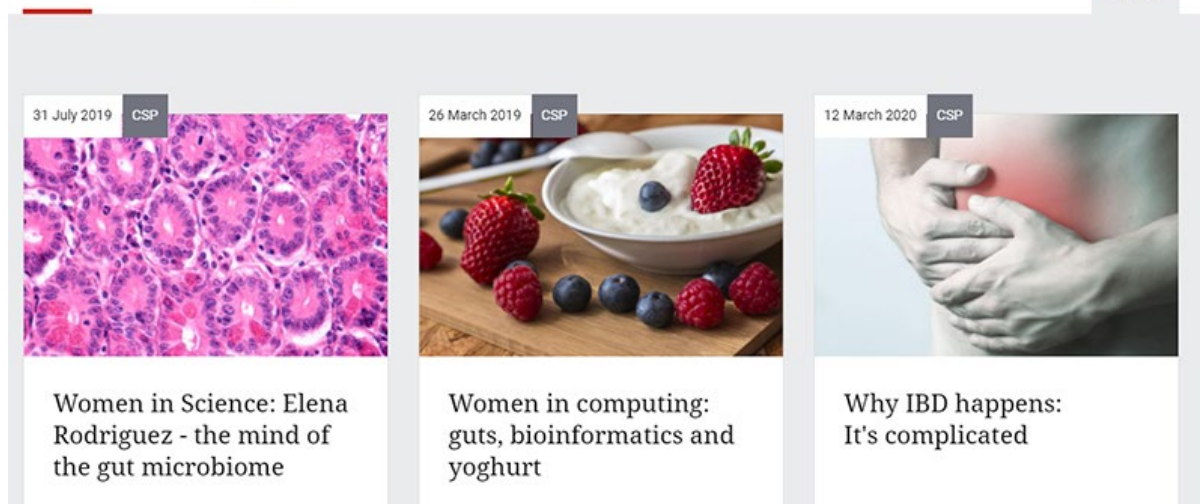
SOLUTION: Add an alt attribute to the image. The attribute value should accurately and succinctly present the content and function of the image. If the content of the image is conveyed in the context or surroundings of the image, or if the image does not convey content or have a function, it should be given empty/null alternative text (alt="").

17. **Broken ARIA reference.** aria-describedby reference exists, but the target for the reference does not exist. This is occurring in the 'Related reading' section of the page. ARIA labels and descriptions will not be presented if the element referenced does not exist in the page. See WCAG 4.1.2

Related reading.

31 July 2019 CSP

Women in Science: Elena
Rodriguez - the mind of
the gut microbiome

26 March 2019 CSP

Women in computing:
guts, bioinformatics and
yoghurt

12 March 2020 CSP

Why IBD happens:
It's complicated

Example:

```
<div class="link-panel dynamic-panel col-xs-12 col-ps-12 col-sm-12 col-
md-12 col-lg-12 slick-slide slick-active" style="width:
400px;" tabindex="-1" role="option" aria-describedby="slick-
slide01" data-slick-index="1" aria-hidden="false">
```
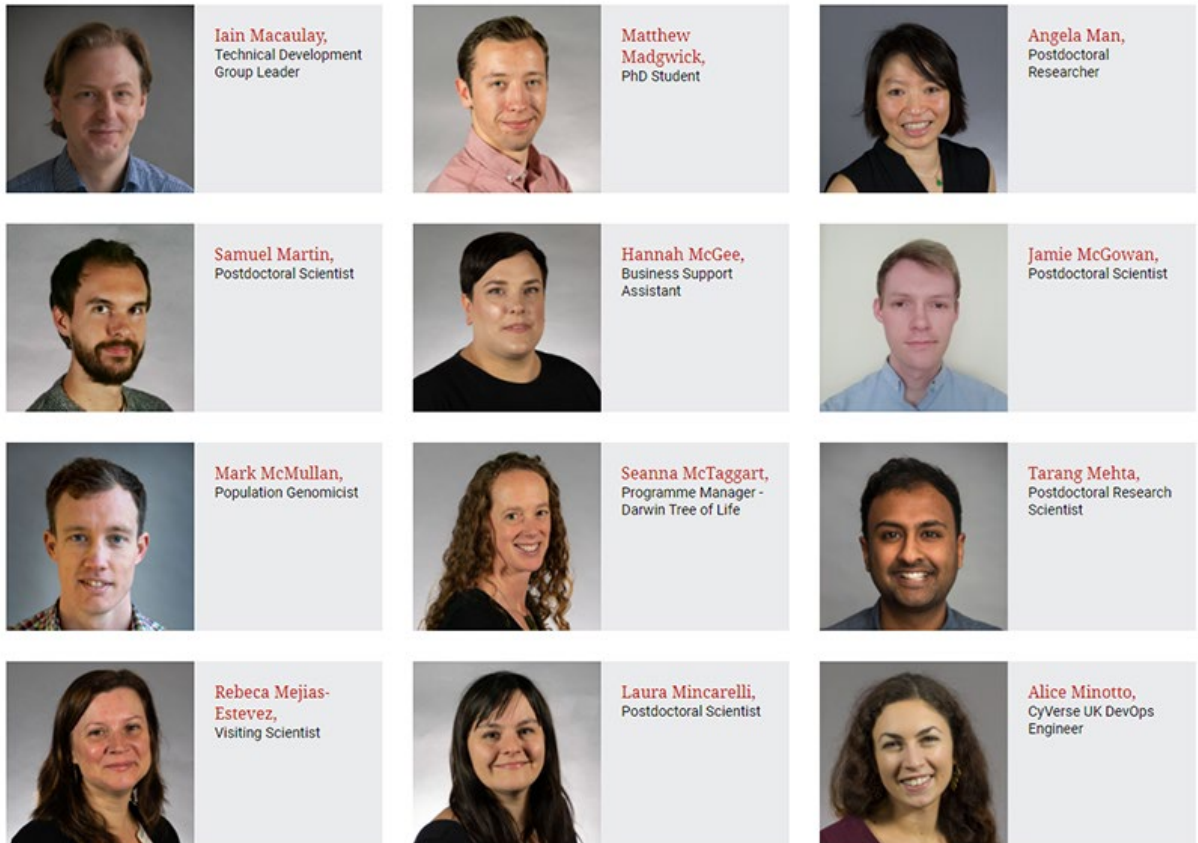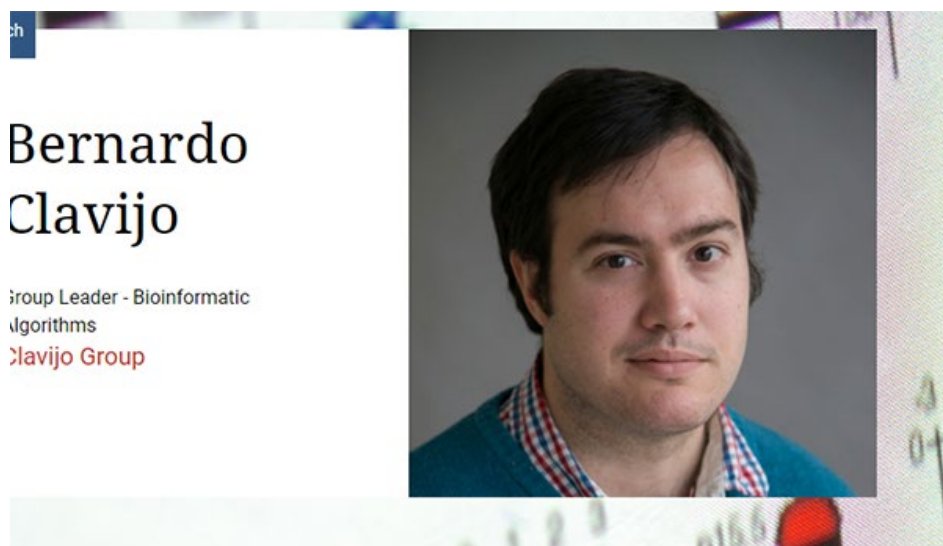
SOLUTION: Ensure the element referenced in the aria-describedby attribute value is present within the page and presents a proper label or description.

5: PAGE TESTED: HTTPS://WWW.EARLHAM.AC.UK/OUR-PEOPLE

This page encountered all the issues covered by the site-wide issues section

Additional issues encountered:

18. **Missing alternative text.** Image alternative text is not present. This is occurring for each image within the main content section of the page. Each image must have an alt attribute. Without alternative text, the content of an image will not be available to screen reader users or when the image is unavailable. See WCAG 1.1.1

Example:

```
<img class=" image-sc-inner shortcode"
src="https://www.earlham.ac.uk/sites/default/files/images/profiles/Seanna-McTaggart/seanna-mctaggart-web.jpg">
```

SOLUTION: Add an alt attribute to the image. The attribute value should accurately and succinctly present the content and function of the image. If the content of the image is conveyed in the context or surroundings of the image, or if the image does not convey content or have a function, it should be given empty/null alternative text (alt="").

This page encountered all the issues covered by the site-wide issues section

Additional issues encountered:

19. **Missing alternative text.** Image alternative text is not present. This is occurring for the main profile image within the main content section of the page. Each image must have an alt attribute. Without alternative text, the content of an image will not be available to screen reader users or when the image is unavailable. See WCAG 1.1.1

Example:

```
<img class=" image-sc-inner shortcode"
src="https://www.earlham.ac.uk/sites/default/files/images/profiles/Bern
ardo%20Clavijo/bernardo-clavijo-web.jpg">
```

SOLUTION: Add an alt attribute to the image. The attribute value should accurately and succinctly present the content and function of the image. If the content of the image is conveyed in the context or surroundings of the image, or if the image does not convey content or have a function, it should be given empty/null alternative text (alt="").

20. **Missing alternative text.** Image alternative text is not present. This is occurring for all images within the 'projects' and 'related reading' sections of the page. Each image must have an alt attribute. Without alternative text, the content of an image will not be available to screen reader users or when the image is unavailable. See WCAG 1.1.1

Projects.

Ash dieback evolution and population genomics

Understanding the invasion of the ash dieback pathogen

Sequencing the wheat genome

Related reading.

Metagenomics: exploring the unseen

UK CBCB: an ELIXIR for cross-disciplinary collaboration in bioinformatics

The Weird and Wonderful World of Protists: an interview with Sally Warring

<mark>Example:</mark>

```
img class=" image-sc-inner shortcode"
src="https://www.earlham.ac.uk/sites/default/files/images/projects/Understanding%20invasion%20of%20ash%20dieback/understanding-invasion-ash-dieback-hero.jpg">
```

SOLUTION: Add an alt attribute to the image. The attribute value should accurately and succinctly present the content and function of the image. If the content of the image is conveyed in the context or surroundings of the image, or if the image does not convey content or have a function, it should be given empty/null alternative text (alt="").

21. **Broken ARIA reference.** aria-describedby reference exists, but the target for the reference does not exist. This is occurring in the 'Related reading' section of the page. ARIA labels and descriptions will not be presented if the element referenced does not exist in the page. See WCAG 4.1.2

Related reading.

```
<div class="link-panel dynamic-panel col-xs-12 col-ps-12 col-sm-12 col-
md-12 col-lg-12 slick-slide" style="width: 400px;" tabindex="-
1" role="option" aria-describedby="slick-slide07" data-slick-
index="7" aria-hidden="true">
```

SOLUTION: Ensure the element referenced in the aria-describedby attribute value is present within the page and presents a proper label or description.

22. **Contrast Errors.** Very low contrast between foreground and background colours. This applies to the "Science" tab within the related reading slider panel, where the contrast ratio is only 1.93:1 which is well below the required 4.5:1 recommended ratio. Adequate contrast is necessary for all users, especially users with low vision. See WCAG 1.4.3

SOLUTION: Increase the contrast between the foreground (text) colour and the background colour.

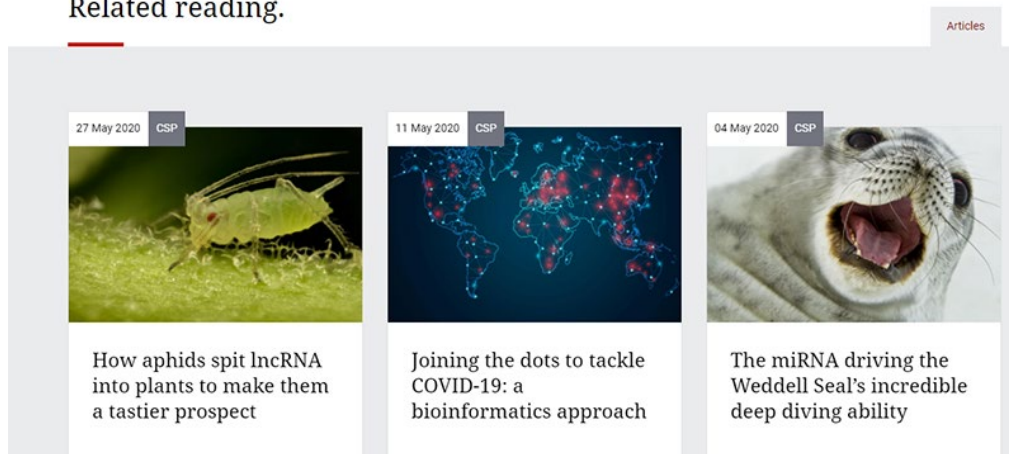This page encountered all the issues covered by the site-wide issues section

Additional issues encountered:

23. **Missing alternative text.** Image alternative text is not present. This is occurring for all images within the 'People working on the project' and 'related reading' sections of the page. Each image must have an alt attribute. Without alternative text, the content of an image will not be available to screen reader users or when the image is unavailable. See WCAG 1.1.1
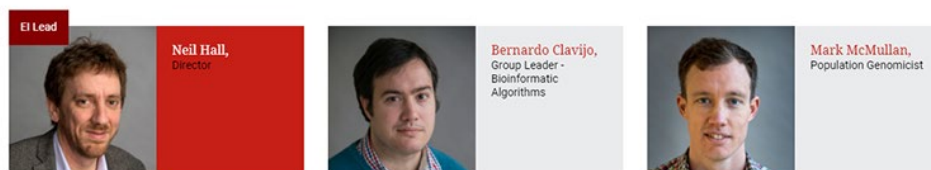
Example:
```
<img class=" image-sc-inner shortcode"
src="https://www.earlham.ac.uk/sites/default/files/images/profiles/Bernardo%20Clavijo/bernardo-clavijo-web.jpg">
```

SOLUTION: Add an alt attribute to the image. The attribute value should accurately and succinctly present the content and function of the image. If the content of the image is conveyed in the context or surroundings of the image, or if the image does not convey content or have a function, it should be given empty/null alternative text (alt="").

24. **Broken ARIA reference.** aria-describedby reference exists, but the target for the reference does not exist. This is occurring in the 'Related reading' section of the page. ARIA labels and

descriptions will not be presented if the element referenced does not exist in the page. See WCAG 4.1.2

Related reading.

Articles

27 May 2020 CSP

How aphids spit lncRNA into plants to make them a tastier prospect

11 May 2020 CSP

Joining the dots to tackle COVID-19: a bioinformatics approach

04 May 2020 CSP

The miRNA driving the Weddell Seal's incredible deep diving ability
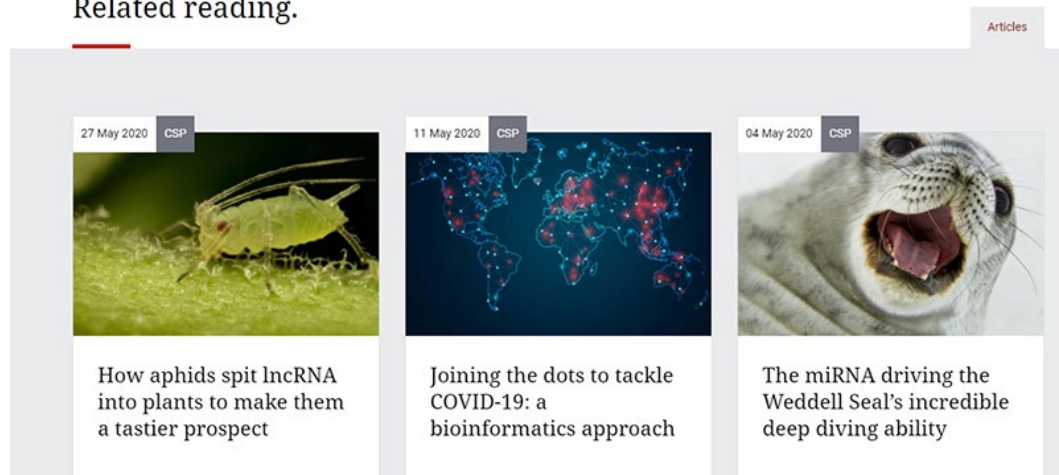
Example:
```
<div class="link-panel dynamic-panel col-xs-12 col-ps-12 col-sm-12 col-md-12 col-lg-12 slick-slide" style="width: 400px;" tabindex="-1" role="option" aria-describedby="slick-slide07" data-slick-index="7" aria-hidden="true">
```

SOLUTION: Ensure the element referenced in the aria-describedby attribute value is present within the page and presents a proper label or description.

25. **Empty link.** A link contains no text. These errors are caused by the items in the social media sharing menu (right side).If a link contains no text, the function or purpose of the link will not be presented to the user. This can introduce confusion for keyboard and screen reader users. See WCAG 2.4.4

Example:
```
<li class=" sc-type-list-item js-email-link cha-1639411029 shortcode" data-sc-guid="573dbe0002cc9">
<a class=" cha-button-68 cha-2102521526 shortcode" target="_self" href="javascript:;"></a>
</li><li class=" sc-type-list-item js-twitter-link cha-1639411029 shortcode" data-sc-guid="573dbe0002d78">
```

18

```
<a class=" cha-button-70 shortcode" target="_self"
href="javascript:;"></a>
</li>
```

SOLUTION: Provide text within the link that describes the functionality and/or target of that link.

26. **Contrast Errors.** Very low contrast between foreground and background colours. This applies to the "Science" tab within the related reading slider panel, where the contrast ratio is only 1.93:1 which is well below the required 4.5:1 recommended ratio. Adequate contrast is necessary for all users, especially users with low vision. See WCAG 1.4.3

SOLUTION: Increase the contrast between the foreground (text) colour and the background colour.

27. **Contrast Errors.** Very low contrast between foreground and background colours. This applies to the title "Director" in black on a red background, where the contrast ratio is only 3.6:1 which is below the required 4.5:1 recommended ratio. Adequate contrast is necessary for all users, especially users with low vision. See WCAG 1.4.3

SOLUTION: Increase the contrast between the foreground (text) colour and the background colour.
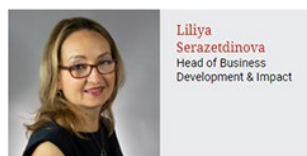
This page encountered all the issues covered by the site-wide issues section

Additional issues encountered:

28. **Missing alternative text.** Image alternative text is not present. This is occurring for all images within the leadership section of the page. Each image must have an alt attribute. Without alternative text, the content of an image will not be available to screen reader users or when the image is unavailable. See WCAG 1.1.1

Example:

```
<img class=" image-sc-inner shortcode"
src="https://www.earlham.ac.uk/sites/default/files/images/profiles/Rob%
20Davey/rob-davey-web.jpg">
```
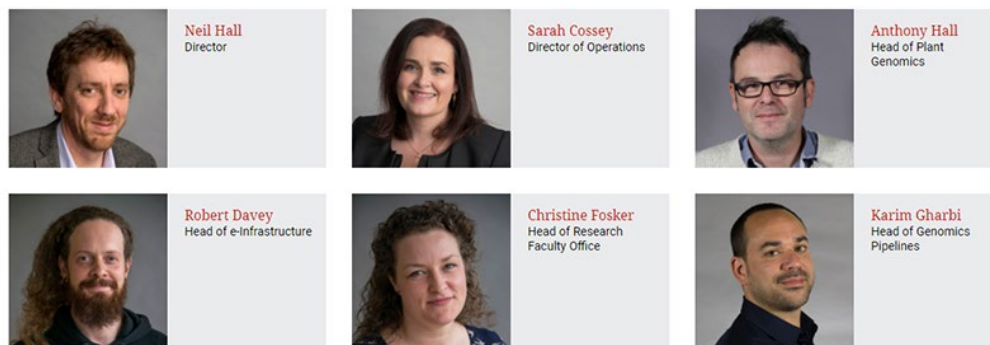
SOLUTION: Add an alt attribute to the image. The attribute value should accurately and succinctly present the content and function of the image. If the content of the image is conveyed in the context or surroundings of the image, or if the image does not convey content or have a function, it should be given empty/null alternative text (alt="").
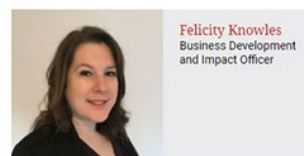
29. **Missing alternative text.** Image alternative text is not present. This is occurring for the images within the 'Our Services' section of the page. Each image must have an alt attribute. Without alternative text, the content of an image will not be available to screen reader users or when the image is unavailable. See WCAG 1.1.1

```
<img class=" image-sc-inner
shortcode" src="https://www.earlham.ac.uk/sites/default/files/images/pa
ges/About%20us/about-services.jpg">
```
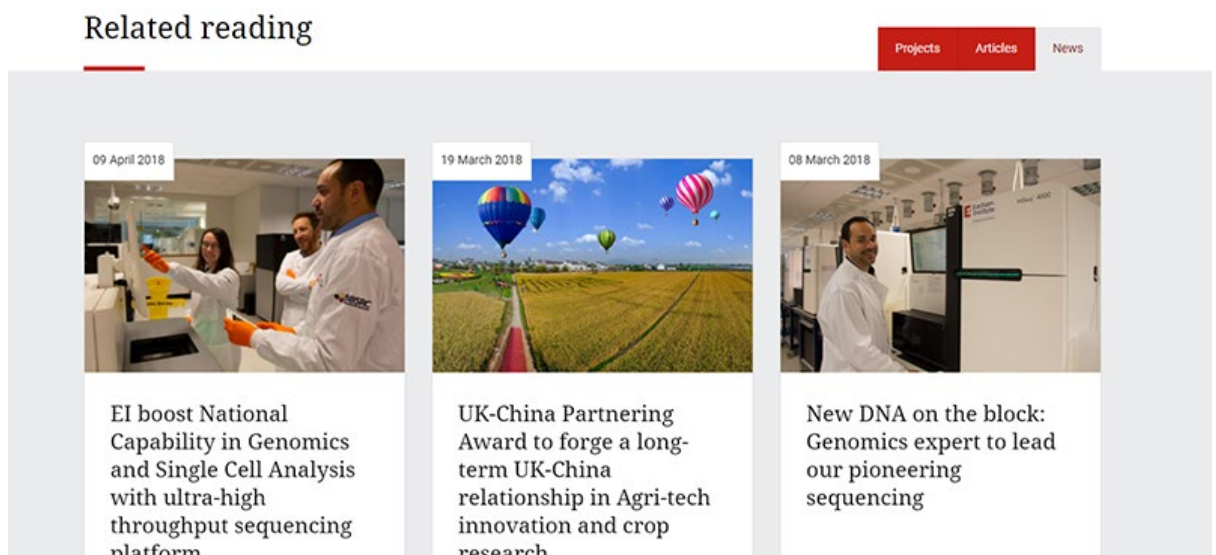
SOLUTION: Add an alt attribute to the image. The attribute value should accurately and succinctly present the content and function of the image. If the content of the image is conveyed in the context or surroundings of the image, or if the image does not convey content or have a function, it should be given empty/null alternative text (alt="").

This page encountered all the issues covered by the site-wide issues section

Additional issues encountered:

30. **Missing alternative text.** Image alternative text is not present. This is occurring for all images within the Contact section of the page. Each image must have an alt attribute. Without alternative text, the content of an image will not be available to screen reader users or when the image is unavailable. See WCAG 1.1.1

Example:

```
<img class=" image-sc-inner shortcode"
src="https://www.earlham.ac.uk/sites/default/files/images/profiles/Felicity%20Knowles/felicity-knowles-web-temp.jpg">
```

SOLUTION: Add an alt attribute to the image. The attribute value should accurately and succinctly present the content and function of the image. If the content of the image is conveyed in the context or surroundings of the image, or if the image does not convey content or have a function, it should be given empty/null alternative text (alt="").

31. **Missing alternative text.** Image alternative text is not present. This is occurring for the images within the 'Case studies' section of the page. Each image must have an alt attribute. Without alternative text, the content of an image will not be available to screen reader users or when the image is unavailable. See WCAG 1.1.1

Case studies.

Towards a sustainable
future for wheat

```
<img class=" image-sc-inner
shortcode" src="https://www.earlham.ac.uk/sites/default/files/styles/th
ree_by_two/public/images/pages/Engaging%20with%20us/engaging-case-
study.jpg?itok=7w6fRmht">
```

SOLUTION: Add an alt attribute to the image. The attribute value should accurately and succinctly present the content and function of the image. If the content of the image is conveyed in the context or surroundings of the image, or if the image does not convey content or have a function, it should be given empty/null alternative text (alt="").

This page encountered all the issues covered by the site-wide issues section

Additional issues encountered:

32. **Missing alternative text.** Image alternative text is not present. This is occurring in the 'Related reading' section of the page. Each image must have an alt attribute. Without alternative text, the content of an image will not be available to screen reader users or when the image is unavailable. See WCAG 1.1.1

Example:
```
<img class=" image-sc-inner shortcode"
src="https://www.earlham.ac.uk/sites/default/files/styles/three_by_two/
public/UK-China-Partnering-Award-Header.jpg?itok=naFDArH7">
```

SOLUTION: Add an alt attribute to the image. The attribute value should accurately and succinctly present the content and function of the image. If the content of the image is conveyed in the context or surroundings of the image, or if the image does not convey content or have a function, it should be given empty/null alternative text (alt="").

33. **Broken ARIA reference.** aria-describedby reference exists, but the target for the reference does not exist. This is occurring in the 'Related reading' section of the page. ARIA labels and descriptions will not be presented if the element referenced does not exist in the page. See WCAG 4.1.2

Related reading

```
<div class="link-panel dynamic-panel col-xs-12 col-ps-12 col-sm-12 col-
md-12 col-lg-12 slick-slide" style="width: 400px;" tabindex="-
1" role="option" aria-describedby="slick-slide24" data-slick-
index="4" aria-hidden="true">
```

SOLUTION: Ensure the element referenced in the aria-describedby attribute value is present within the page and presents a proper label or description.

34. **Contrast Errors.** Very low contrast between foreground and background colours. This applies to the "Technology" and "Science" tabs within the related reading slider panel, where the contrast ratios are only 1.98:1 and 1.93:1 which are well below the required 4.5:1 recommended ratio. Adequate contrast is necessary for all users, especially users with low vision. See WCAG 1.4.3

SOLUTION: Increase the contrast between the foreground (text) colour and the background colour.

11: PAGE TESTED: HTTPS://WWW.EARLHAM.AC.UK/NEWSROOM

This page encountered all the issues covered by the site-wide issues section

Additional issues encountered:

35. **Missing alternative text.** Image alternative text is not present. This is occurring for all news items listed on the page. Each image must have an alt attribute. Without alternative text, the content of an image will not be available to screen reader users or when the image is unavailable. See WCAG 1.1.1

Example:
```
<img class=" image-sc-inner shortcode"
src="https://www.earlham.ac.uk/sites/default/files/styles/three_by_two/
public/Syn-Bio-Nicola-Patron-Plant.jpg?itok=M1h4c8sq">
```
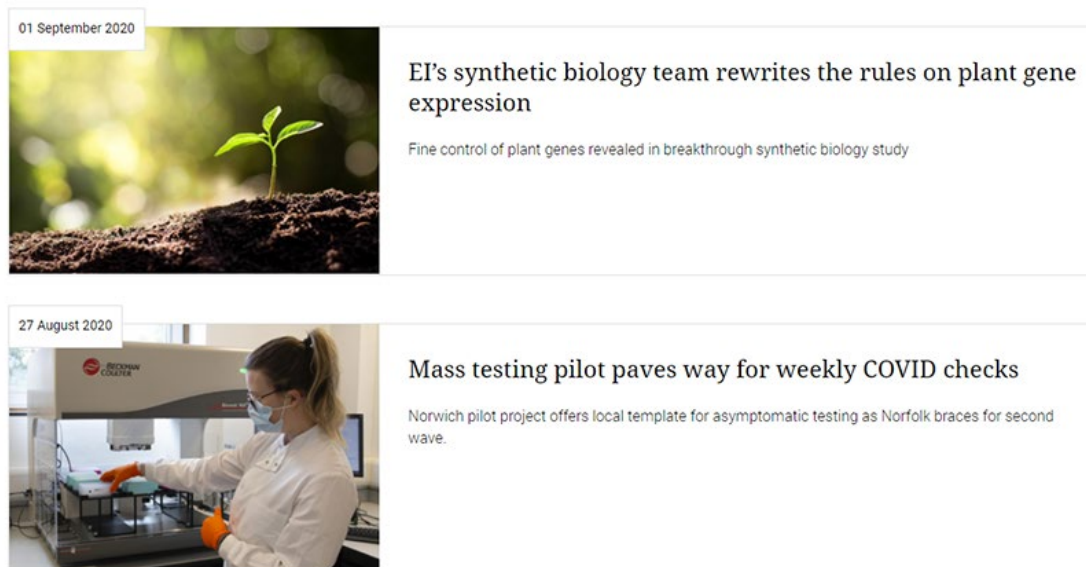
SOLUTION: Add an alt attribute to the image. The attribute value should accurately and succinctly present the content and function of the image. If the content of the image is conveyed in the context or surroundings of the image, or if the image does not convey content or have a function, it should be given empty/null alternative text (alt="").

36. **Empty link.** A link contains no text. These errors are caused by the items in the social media menu above the subscribe form. If a link contains no text, the function or purpose of the link will not be presented to the user. This can introduce confusion for keyboard and screen reader users. See WCAG 2.4.4

Example:
```
<li class=" sc-type-list-item cha-1639411029 shortcode" data-sc-
```

```
guid="573064f5db3b9"><a class=" cha-button-108 cha-4082853155
shortcode" target="_blank" href="https://twitter.com/EarlhamInst"></a>

</li><li class=" sc-type-list-item cha-1639411029 shortcode" data-sc-
guid="573064f5db46a"><a class=" cha-button-108 cha-4064076070
shortcode" target="_blank" href="https://www.instagram.com/earlhaminsti
tute"></a>
```

SOLUTION: Provide text within the link that describes the functionality and/or target of that link.

This page encountered all the issues covered by the site-wide issues section

Additional issues encountered:

37. **Missing alternative text.** Image alternative text is not present. This is occurring for the image within the 'body of the news story. Each image must have an alt attribute. Without alternative text, the content of an image will not be available to screen reader users or when the image is unavailable. See WCAG 1.1.1

Code:

```
<img class=" image-sc-inner shortcode"
src="https://www.earlham.ac.uk/sites/default/files/Cichlid%20Hero.png">
```

SOLUTION: Add an alt attribute to the image. The attribute value should accurately and succinctly present the content and function of the image. If the content of the image is conveyed in the context or surroundings of the image, or if the image does not convey content or have a function, it should be given empty/null alternative text (alt="").

38. **Empty link.** A link contains no text. These errors are caused by the items in the social media sharing menu (right side).If a link contains no text, the function or purpose of the link will not be presented to the user. This can introduce confusion for keyboard and screen reader users. See WCAG 2.4.4

```
<li class=" sc-type-list-item js-email-link cha-1639411029
shortcode" data-sc-guid="573dbe0002cc9">
<a class=" cha-button-68 cha-2102521526 shortcode"
target="_self" href="javascript:;"></a>
</li><li class=" sc-type-list-item js-twitter-link cha-1639411029
shortcode" data-sc-guid="573dbe0002d78">
<a class=" cha-button-70 shortcode" target="_self"
href="javascript:;"></a>
</li>
```

SOLUTION: Provide text within the link that describes the functionality and/or target of that link.

This page encountered all the issues covered by the site-wide issues section

Additional issues encountered:

39. **Missing alternative text.** Image alternative text is not present. This is occurring for all images within the body of the page, including the large feature images and the six smaller article images. Each image must have an alt attribute. Without alternative text, the content of an image will not be available to screen reader users or when the image is unavailable. See WCAG 1.1.1
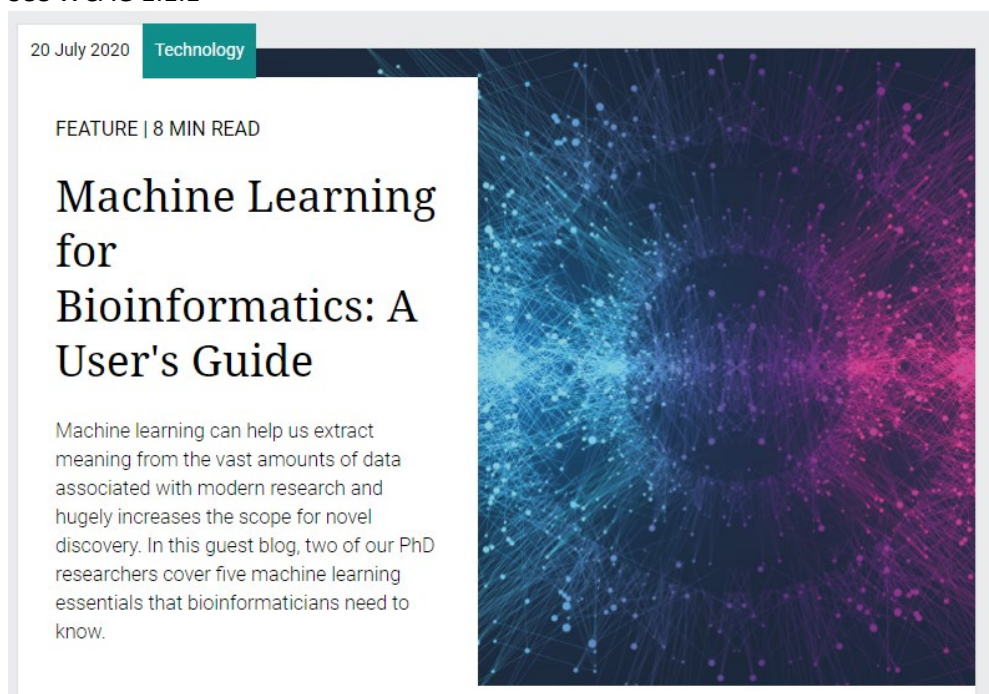
09 June 2020 | Technology | Science

SPECIAL FEATURE | 10 MIN READ

From cracking the Enigma to decoding living systems: Turing's gifts

Codebreaking, computing, technological development, mathematics, interdisciplinarity. All of these make Earlham Institute a powerful catalyst for life science research, and would perhaps not have been so swiftly brought to bear if it weren't for Alan Turing, whose birthday, life and achievements we celebrate today.

---

13 July 2020 | Public engagement | Learning

FEATURE | 5 MIN READ

What's buzzing about your bee hotel? The results are in!

Bees are crucial pollinators, and we need them if we are to maintain a healthy diet.

---

05 July 2020 | Organisation | Learning

QUICK READ | READ

Translating research is vital for success in the new academic landscape

Science and business haven't always been the best bedfellows. But in a world of

---

28 June 2020 | Science | Learning

FEATURE | 10 MIN READ

10 Pollinators you never knew were crucial for your 5-A-Day, chocolate, and tequila!

Honeybees get all the press, but what about

---

24 August 2020 | Science

FEATURE | 5 MIN READ

UK CBCB: an ELIXIR for

---

23 August 2020 | Science

FEATURE | 10 MIN READ

The Weird and

---

17 August 2020 | Learning

FEATURE | 5 MIN READ

EI Innovate: A platform

31

```
<img class=" image-sc-inner shortcode"
src="https://www.earlham.ac.uk/sites/default/files/Cichlid%20Hero.png">
```

SOLUTION: Add an alt attribute to the image. The attribute value should accurately and succinctly present the content and function of the image. If the content of the image is conveyed in the context or surroundings of the image, or if the image does not convey content or have a function, it should be given empty/null alternative text (alt="").

40. **Empty link.** A link contains no text. These errors are caused by the items in the social links menu above the subscribe form. If a link contains no text, the function or purpose of the link will not be presented to the user. This can introduce confusion for keyboard and screen reader users. See WCAG 2.4.4


Subscribe.

```
<li class=" sc-type-list-item cha-1639411029 shortcode" data-sc-
guid="573064f5db3b9"><a class=" cha-button-108 cha-4082853155
shortcode" target="_blank" href="https://twitter.com/EarlhamInst"></a>

</li><li class=" sc-type-list-item cha-1639411029 shortcode" data-sc-
guid="573064f5db46a"><a class=" cha-button-108 cha-4064076070
shortcode" target="_blank" href="https://www.instagram.com/earlhaminsti
tute"></a>
```

SOLUTION: Provide text within the link that describes the functionality and/or target of that link.

41. **Contrast Errors.** Very low contrast between foreground and background colours. This applies to the "Technology" "Learning" and "Science" coloured tabs where the contrast ratios are 1.98:1, 4.01:1 and 1.93:1 which are all below the required 4.5:1 recommended ratio. Adequate contrast is necessary for all users, especially users with low vision. See WCAG 1.4.3
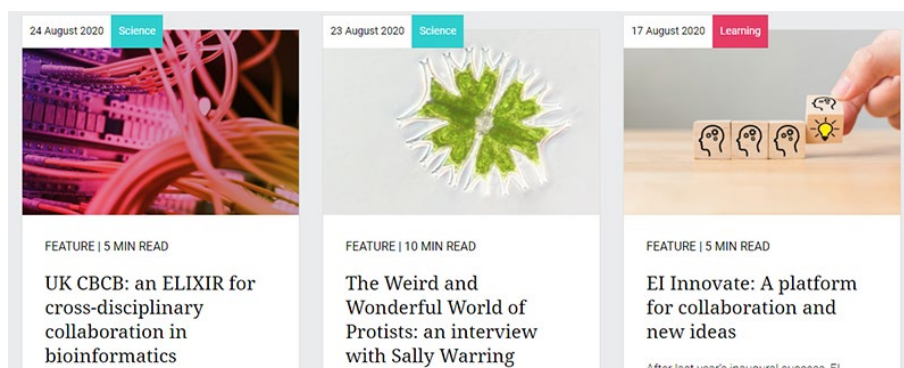
42. **Contrast Errors.** Very low contrast between foreground and background colours. This applies to the Twitter panels where the contrast ratio between the black text and the red background is 3.6:1 which is below the required 4.5:1 recommended ratio. Adequate contrast is necessary for all users, especially users with low vision. See WCAG 1.4.3
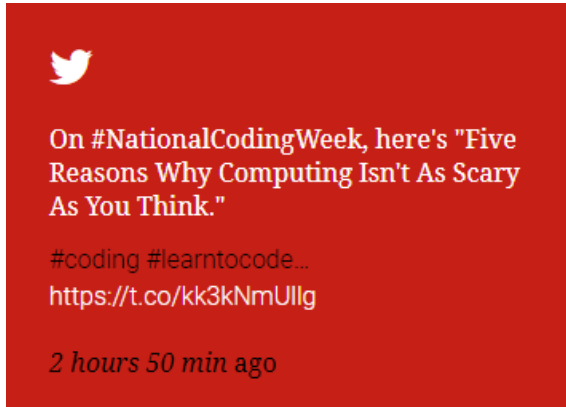
SOLUTION: Increase the contrast between the foreground (text) colour and the background colour.

14: PAGE TESTED: HTTPS://WWW.EARLHAM.AC.UK/ARTICLES/EI-INNOVATE-PLATFORM-COLLABORATION-AND-NEW-IDEAS

This page encountered all the issues covered by the site-wide issues section

Additional issues encountered:

43. **Missing alternative text.** Image alternative text is not present. This is occurring for all images within the body of the page, including the Business group, the author and the related reading images. Each image must have an alt attribute. Without alternative text, the content of an image will not be available to screen reader users or when the image is unavailable. See WCAG 1.1.1

```
<img class=" image-sc-inner shortcode"
src="https://www.earlham.ac.uk/sites/default/files/images/profiles/Peter%20Bickerton/peter-bickerton-web2.jpg">
```

SOLUTION: Add an alt attribute to the image. The attribute value should accurately and succinctly present the content and function of the image. If the content of the image is conveyed in the context or surroundings of the image, or if the image does not convey content or have a function, it should be given empty/null alternative text (alt="").

44. **Broken ARIA reference.** aria-describedby reference exists, but the target for the reference does not exist. This is occurring in the 'Related reading' section of the page. ARIA labels and descriptions will not be presented if the element referenced does not exist in the page. See WCAG 4.1.2
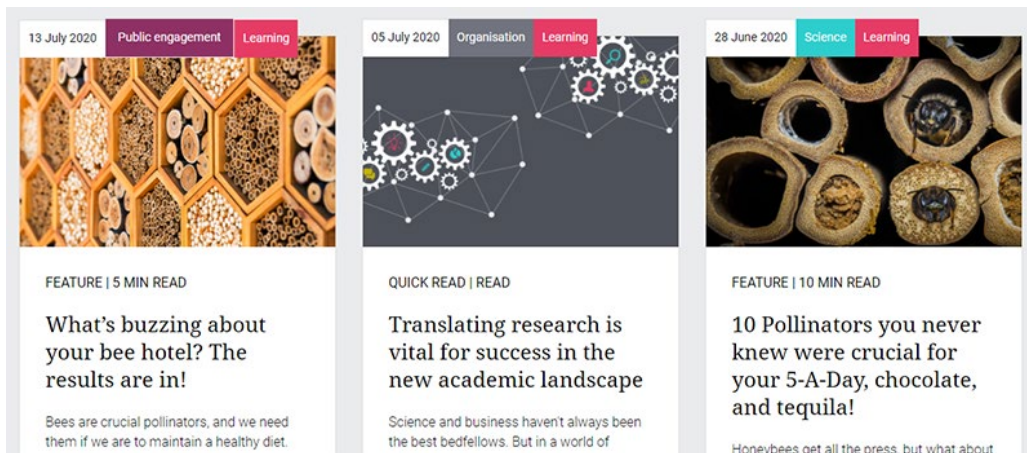
==Example:==
```
<div class="link-panel dynamic-panel col-xs-12 col-ps-12 col-sm-12 col-md-12 col-lg-12 slick-slide slick-active" style="width: 400px;" tabindex="-1" role="option" aria-describedby="slick-slide01" data-slick-index="1" aria-hidden="false">
```

SOLUTION: Ensure the element referenced in the aria-describedby attribute value is present within the page and presents a proper label or description.

45. **Empty link.** A link contains no text. These errors are caused by the items in the social media sharing menu (right side).If a link contains no text, the function or purpose of the link will not be presented to the user. This can introduce confusion for keyboard and screen reader users. See WCAG 2.4.4

```
<li class=" sc-type-list-item js-email-link cha-1639411029
shortcode" data-sc-guid="573dbe0002cc9">
<a class=" cha-button-68 cha-2102521526 shortcode"
target="_self" href="javascript:;"></a>
</li><li class=" sc-type-list-item js-twitter-link cha-1639411029
shortcode" data-sc-guid="573dbe0002d78">
<a class=" cha-button-70 shortcode" target="_self"
href="javascript:;"></a>
</li>
```

SOLUTION: Provide text within the link that describes the functionality and/or target of that link.

46. **Contrast Errors.** Very low contrast between foreground and background colours. This applies to the "Technology" and "Learning" coloured tabs where the contrast ratios are 1.98:1 and 4.01:1 which are both below the required 4.5:1 recommended ratio. Adequate contrast is necessary for all users, especially users with low vision. See WCAG 1.4.3
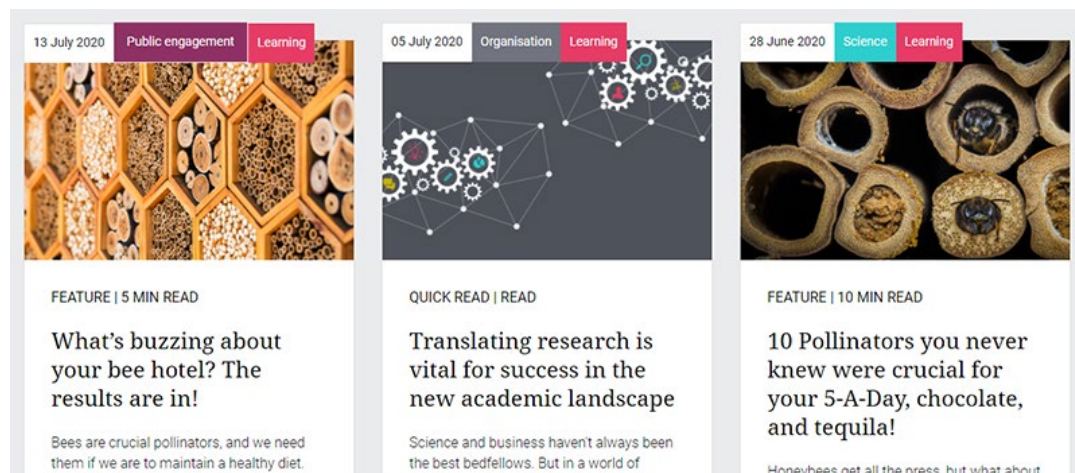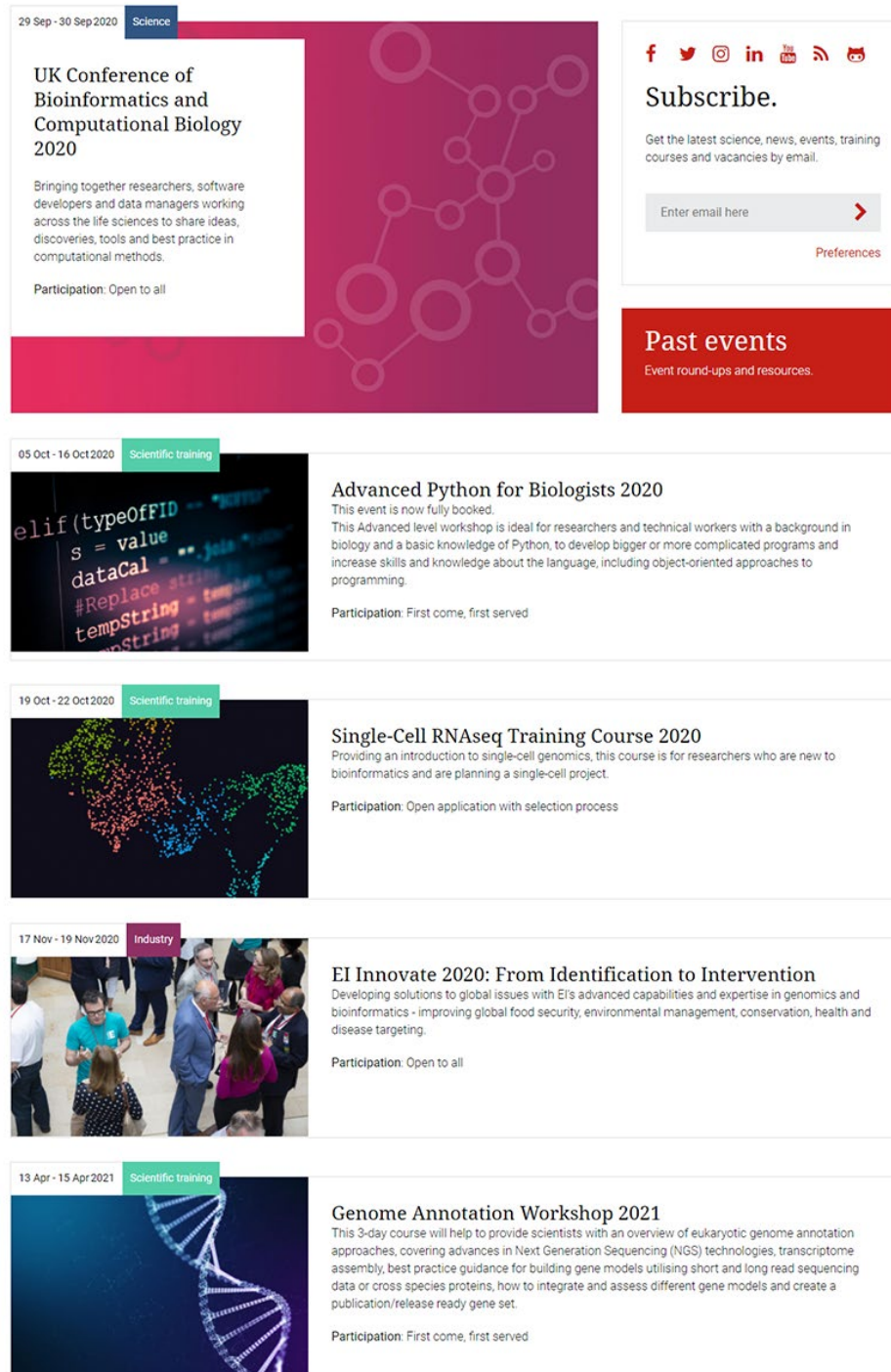
SOLUTION: Increase the contrast between the foreground (text) colour and the background colour.

This page encountered all the issues covered by the site-wide issues section

Additional issues encountered:

47. **Missing alternative text.** Image alternative text is not present. This is occurring for all images within the body of the page, including the large featured image. Each image must have an alt attribute. Without alternative text, the content of an image will not be available to screen reader users or when the image is unavailable. See WCAG 1.1.1

```
<img class=" image-sc-inner shortcode"
src="https://www.earlham.ac.uk/sites/default/files/styles/three_by_two_
large_article/public/images/events/Science/UKCBCB%202020/ukcbcb-
hero.jpg?itok=FNLcL6VW">
```

SOLUTION: Add an alt attribute to the image. The attribute value should accurately and succinctly present the content and function of the image. If the content of the image is conveyed in the context or surroundings of the image, or if the image does not convey content or have a function, it should be given empty/null alternative text (alt="").

48. **Empty link.** A link contains no text. These errors are caused by the items in the social media menu above the subscribe form. If a link contains no text, the function or purpose of the link will not be presented to the user. This can introduce confusion for keyboard and screen reader users. See WCAG 2.4.4

```
<li class=" sc-type-list-item cha-1639411029 shortcode" data-sc-
guid="573064f5db3b9"><a class=" cha-button-108 cha-4082853155
shortcode" target="_blank" href="https://twitter.com/EarlhamInst"></a>

</li><li class=" sc-type-list-item cha-1639411029 shortcode" data-sc-
guid="573064f5db46a"><a class=" cha-button-108 cha-4064076070
shortcode" target="_blank" href="https://www.instagram.com/earlhaminsti
tute"></a>
```

SOLUTION: Provide text within the link that describes the functionality and/or target of that link.

49. **Contrast Errors.** Very low contrast between foreground and background colours. This applies to the "Scientific training" coloured tabs where the contrast ratio is 1.94:1 , well below the required 4.5:1 recommended ratio. Adequate contrast is necessary for all users, especially users with low vision. See WCAG 1.4.3

SOLUTION: Increase the contrast between the foreground (text) colour and the background colour.

This page encountered all the issues covered by the site-wide issues section

Additional issues encountered:

50. **Contrast Errors.** Very low contrast between foreground and background colours. This "Science" coloured tab where the contrast ratios are 1.93:1 which are below the required 4.5:1 recommended ratio. Adequate contrast is necessary for all users, especially users with low vision. See WCAG 1.4.3

SOLUTION: Increase the contrast between the foreground (text) colour and the background colour.