



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.

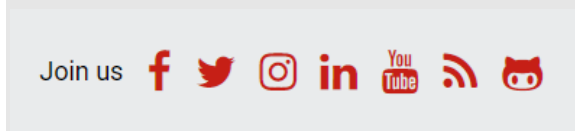
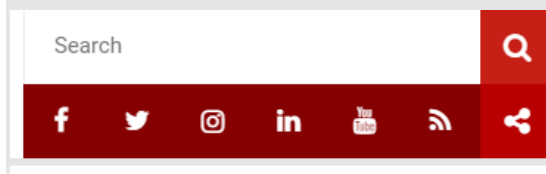
5. **Empty button.** A button is empty or has no value text (x4). When navigating to a button, descriptive text must be presented to screen reader users to indicate the function of the button. See WCAG 2.4.4

```
<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="_bla
nk"></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-
KXQXTZXHyJml1Hfg" 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;">
```

SOLUTION: 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>

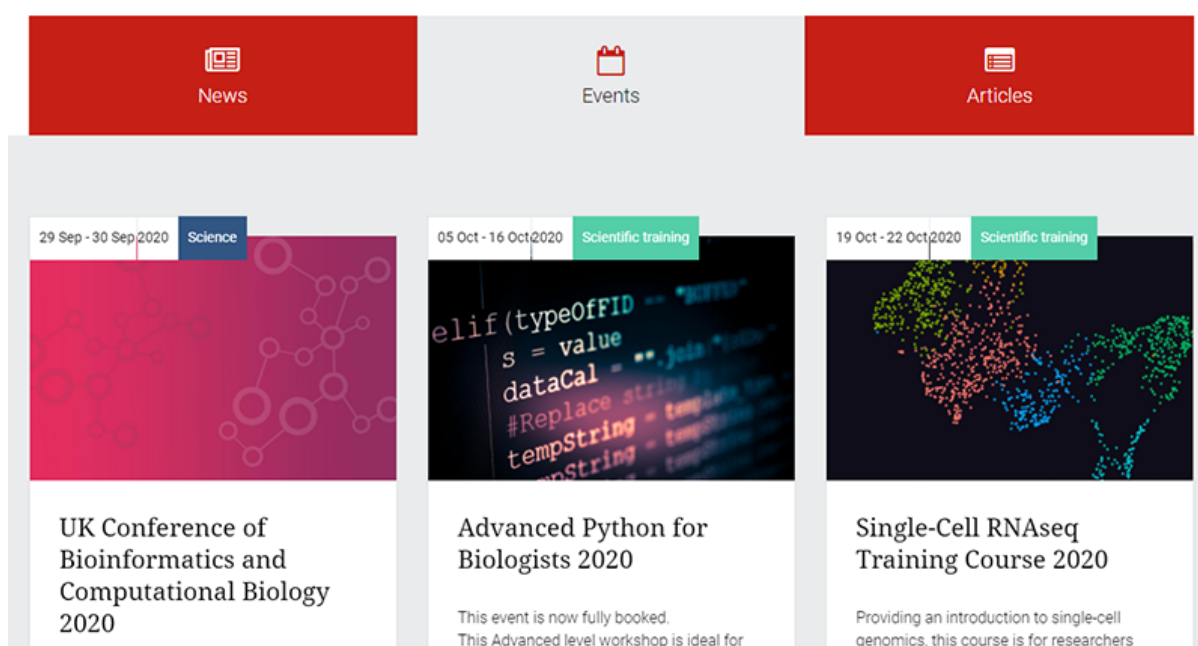
1: PAGE TESTED: [HTTPS://WWW.EARLHAM.AC.UK/](https://www.earlham.ac.uk/)

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

Latest updates.



Example:

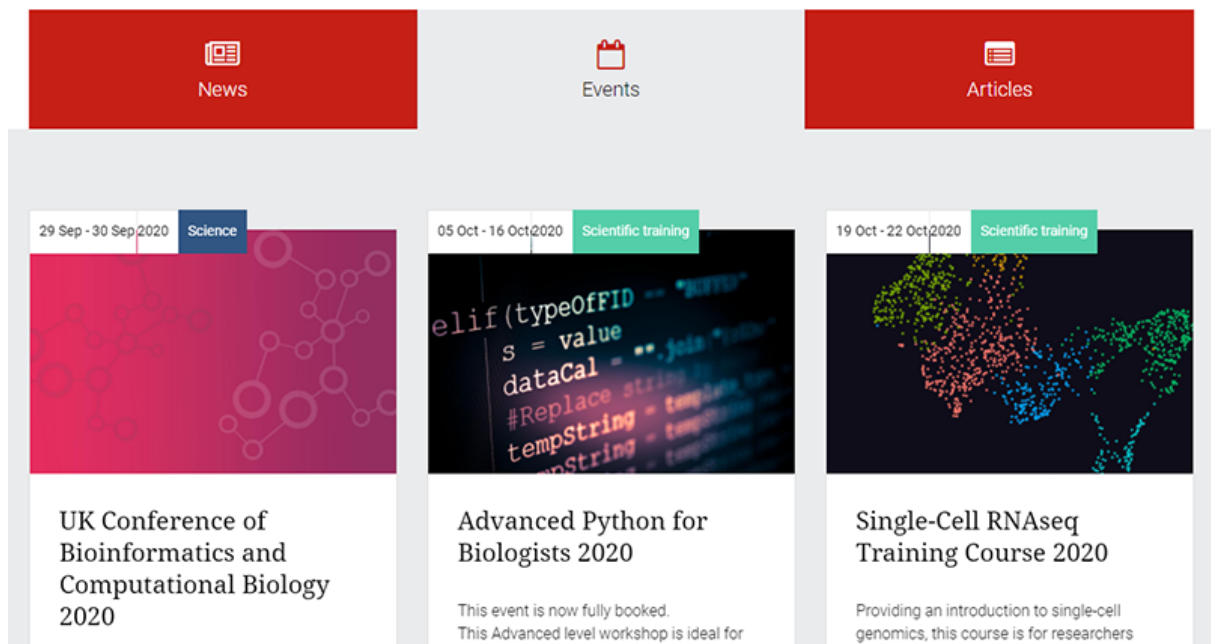
```

```

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.



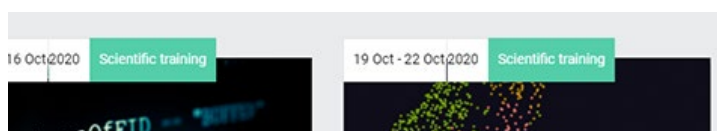
Example:

```
<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-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: 400px;" 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



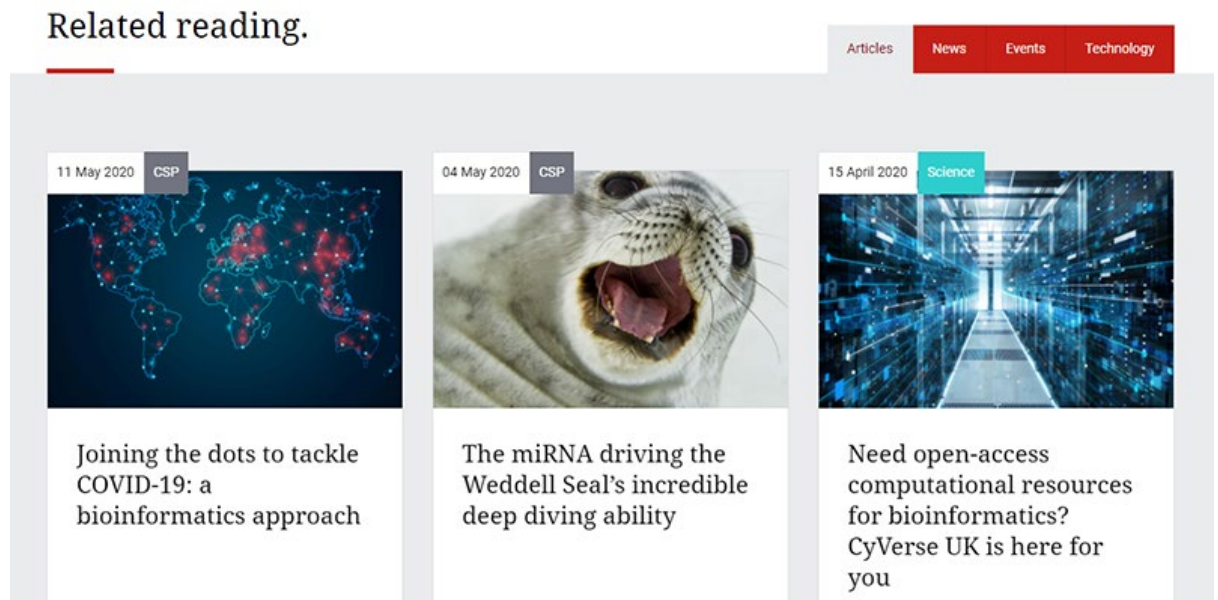
SOLUTION: Increase the contrast between the foreground (text) colour and the background colour.

2: PAGE TESTED: [HTTPS://WWW.EARLHAM.AC.UK/SCIENCE-STRATEGY](https://www.earlham.ac.uk/science-strategy)

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:

```

```


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.


[Articles](#) [News](#) [Events](#) [Technology](#)

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

15 April 2020 Science



Need open-access computational resources for bioinformatics? CyVerse UK is here for you

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.

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](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



Animal

African pygmy mouse

The African pygmy mouse is one of the smallest members of the rodent superfamily. Widespread in sub-Saharan Africa, and a popular pet worldwide.



Animal

Andean Bear

Working to save the Andean Bear from extinction



Microbe

Ash Dieback

Using genomics research to save the Ash trees of Europe.



Animal

Black-footed ferret

Black-footed ferrets are an endangered



Euglena gracilis

Neither animal nor plant, this single-celled protist gets its energy from both food and



Animal

European Polecat

The European polecat is a mustelid species

Example:

```

```

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="").

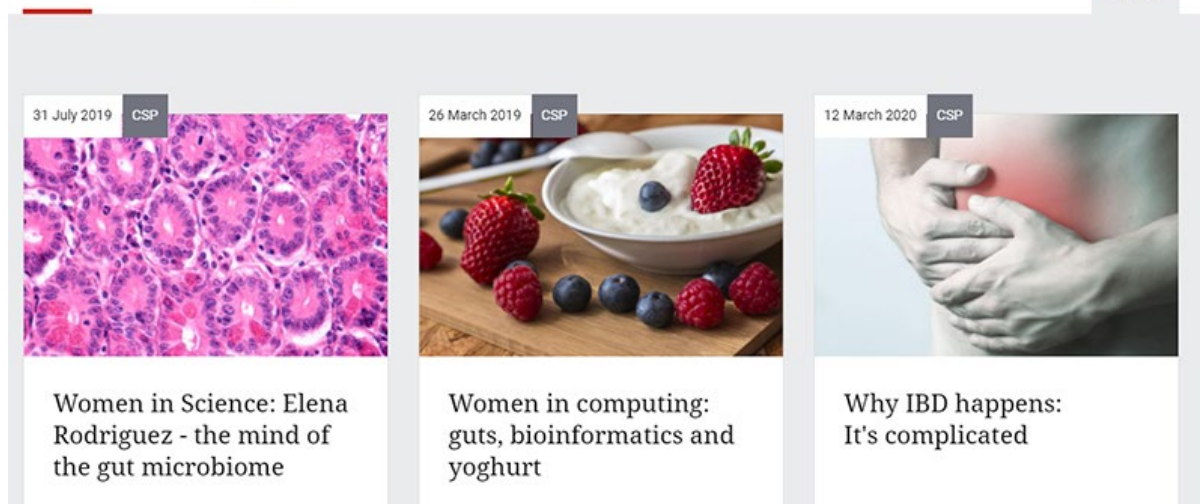
4: PAGE TESTED: [HTTPS://WWW.EARLHAM.AC.UK/HUMAN-MICROBIOME](https://www.earlham.ac.uk/human-microbiome)

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

Related reading.



Example:

```

```

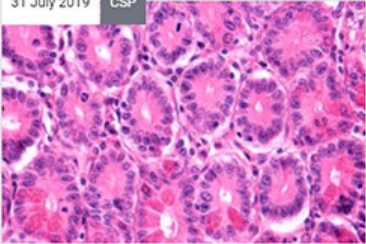
SOLUTION: Add an alt attribute to the image. The attribute value should accurately and succinctly present the content and function of the image. If the content of the image is conveyed in the context or surroundings of the image, or if the image does not convey content or have a function, it should be 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.


Articles

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">
```

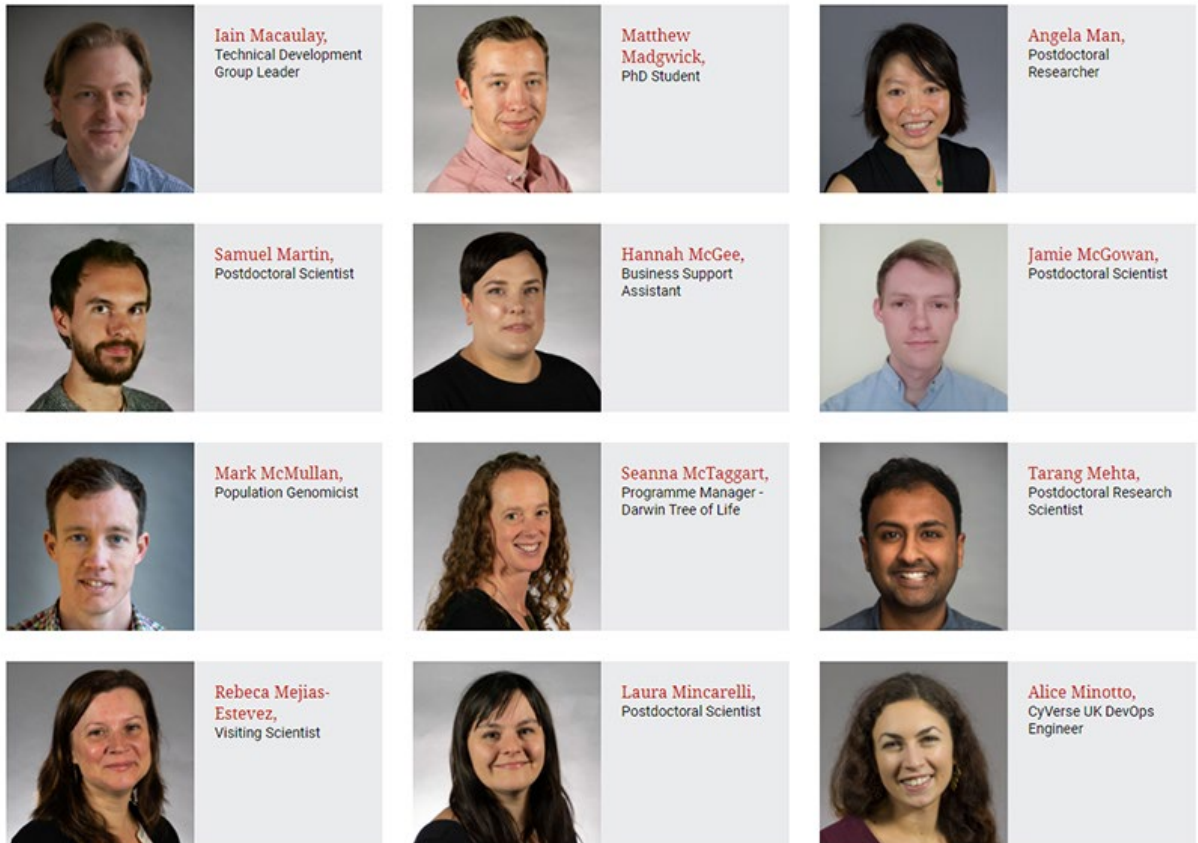
SOLUTION: Ensure the element referenced in the aria-describedby attribute value is present within the page and presents a proper label or description.

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

```

```

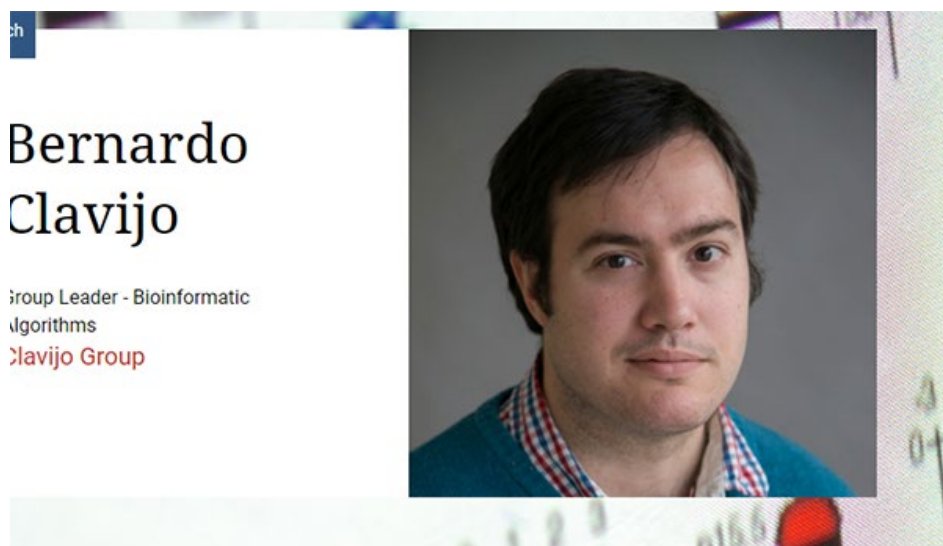
SOLUTION: Add an alt attribute to the image. The attribute value should accurately and succinctly present the content and function of the image. If the content of the image is conveyed in the context or surroundings of the image, or if the image does not convey content or have a function, it should be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

6: PAGE TESTED: [HTTPS://WWW.EARLHAM.AC.UK/BERNARDO-CLAVIJO](https://www.earlham.ac.uk/Bernardo-Clavijo)

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:

```

```

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.

Articles News

06 September 2020 Science

A photograph of an iceberg floating in blue water, with the tip above the surface and a much larger, submerged portion below the water line.

Metagenomics: exploring
the unseen

24 August 2020 Science

A photograph of a dense network of colorful, tangled optical fibers or cables, with red and orange tones dominating the scene.

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

23 August 2020 Science

A photograph of a green, star-shaped microorganism (likely a protist) with a white, web-like structure surrounding it.

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

Example:

```
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.

Articles


News

06 September 2020 Science




Metagenomics: exploring the unseen

24 August 2020 Science



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

23 August 2020 Science



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

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.

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.

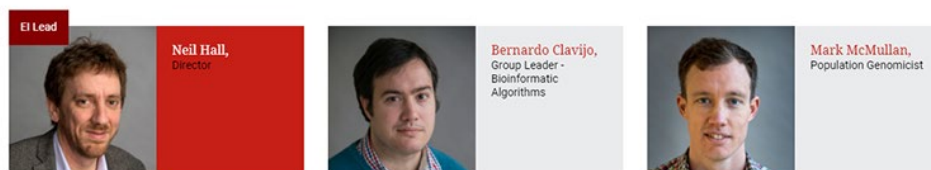
7: PAGE TESTED: [HTTPS://WWW.EARLHAM.AC.UK/UNDERSTANDING-INVASION-ASH-DIEBACK-PATHOGEN](https://www.earlham.ac.uk/understanding-invasion-ash-dieback-pathogen)

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

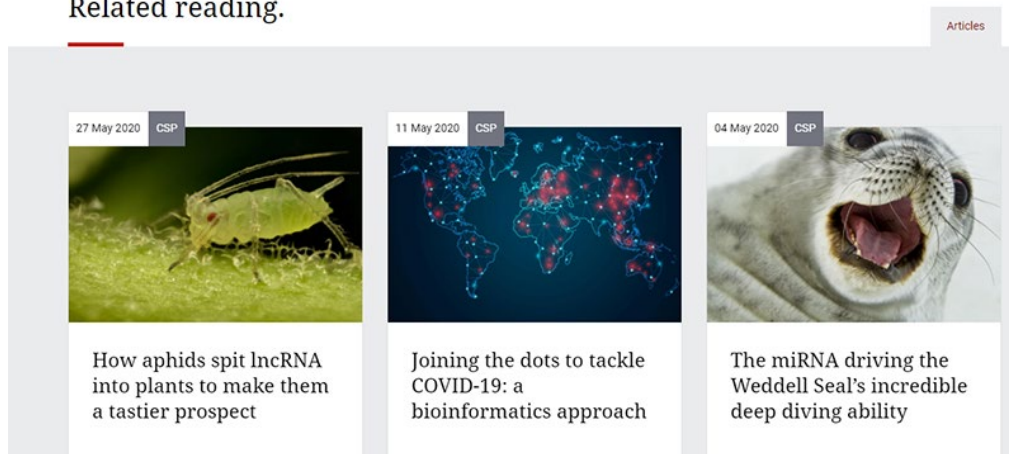
Additional issues encountered:

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

People working on the project.



Related reading.



Example:

```

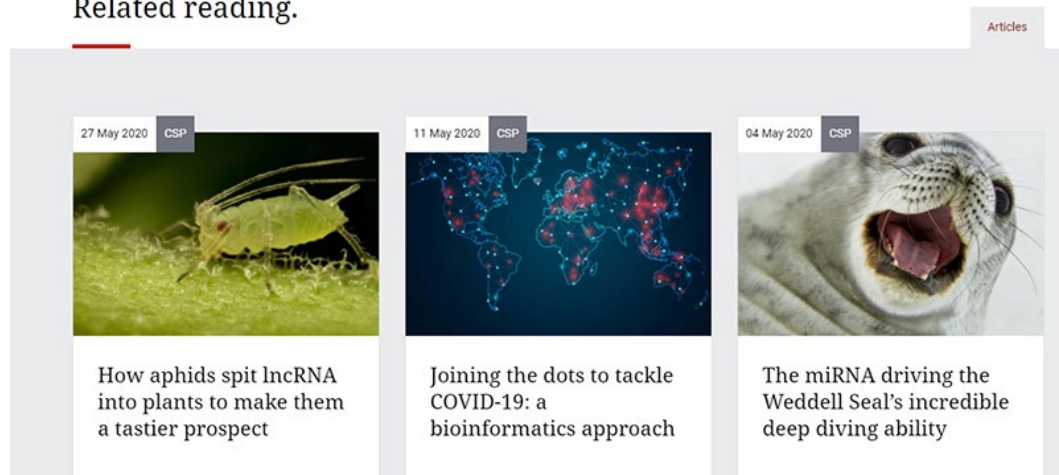
```

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.



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">
```

```
<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



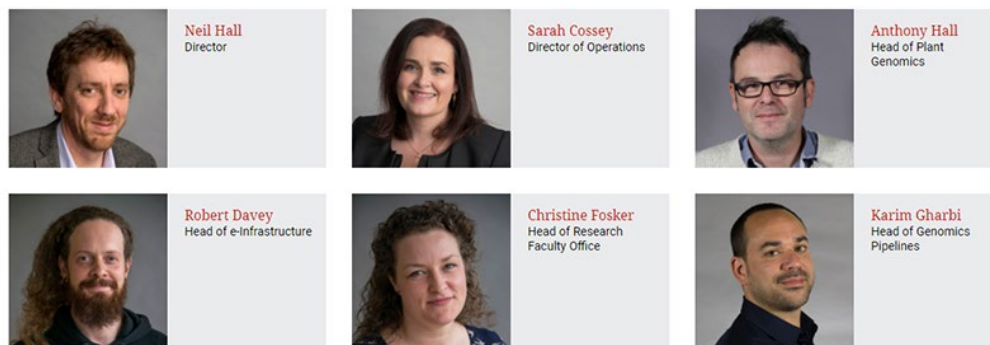
SOLUTION: Increase the contrast between the foreground (text) colour and the background colour.

8: PAGE TESTED: [HTTPS://WWW.EARLHAM.AC.UK/ABOUT-US](https://www.earlham.ac.uk/about-us)

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:

```

```

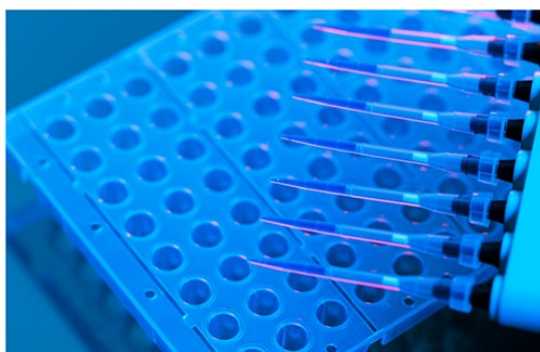
SOLUTION: Add an alt attribute to the image. The attribute value should accurately and succinctly present the content and function of the image. If the content of the image is conveyed in the context or surroundings of the image, or if the image does not convey content or have a function, it should be 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

Services for science and industry.

We combine cutting-edge technologies with world-class expertise to deliver the next frontier in scientific research. We host a UK National Capability in Genomics, strategically funded by BBSRC, to promote the application of genomics and bioinformatics to advance bioscience research and innovation. Partnering with industry, we look to share our knowledge, develop new intellectual property and create new technologies.

[Our services >](#)



Code:

```

```

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="").

9: PAGE TESTED: [HTTPS://WWW.EARLHAM.AC.UK/ABOUT-US](https://www.earlham.ac.uk/about-us)

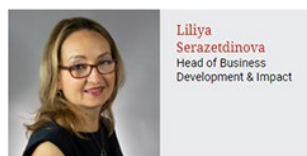
This page encountered all the issues covered by the site-wide issues section

Additional issues encountered:

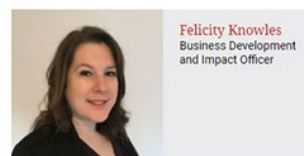
30. **Missing alternative text.** Image alternative text is not present. This is occurring for all images within the Contact section of the page. Each image must have an alt attribute. Without alternative text, the content of an image will not be available to screen reader users or when the image is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

Contact the Business
Development and
Impact Group.

Get in touch 



Liliya
Serazetdinova
Head of Business
Development & Impact



Felicity Knowles
Business Development
and Impact Officer



Nichola Wong
Business Development
& Impact Officer

Example:

```

```

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

Code:

```

```

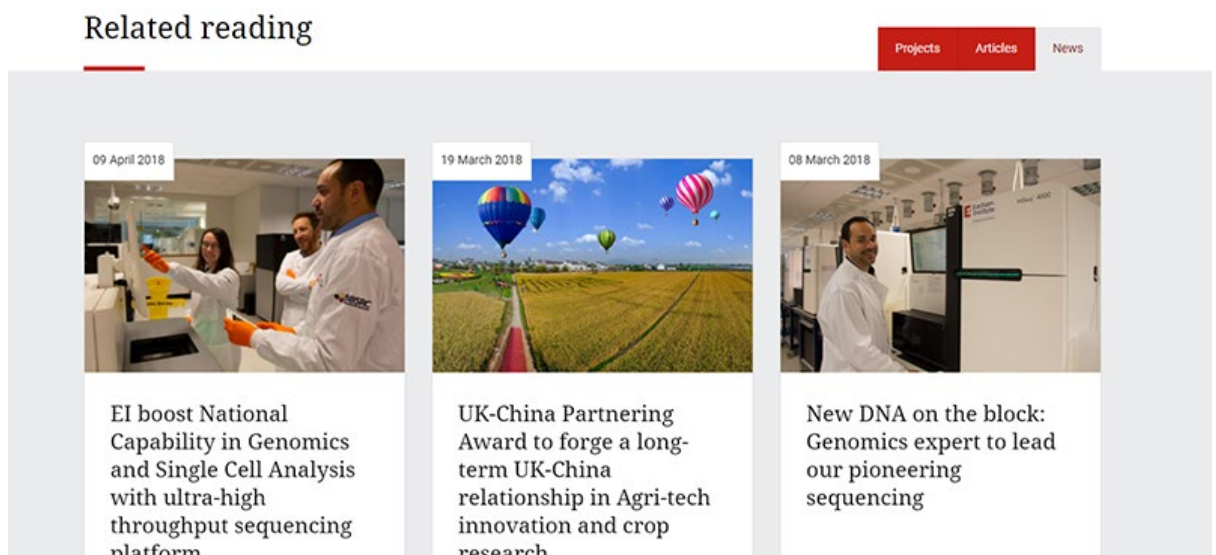
SOLUTION: Add an alt attribute to the image. The attribute value should accurately and succinctly present the content and function of the image. If the content of the image is conveyed in the context or surroundings of the image, or if the image does not convey content or have a function, it should be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

10: PAGE TESTED: [HTTPS://WWW.EARLHAM.AC.UK/ABOUT-US](https://www.earlham.ac.uk/about-us)

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:

```

```

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

Projects Articles News

09 April 2018



EI boost National Capability in Genomics and Single Cell Analysis with ultra-high throughput sequencing platform

19 March 2018



UK-China Partnering Award to forge a long-term UK-China relationship in Agri-tech innovation and crop research

08 March 2018



New DNA on the block: Genomics expert to lead our pioneering sequencing

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-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



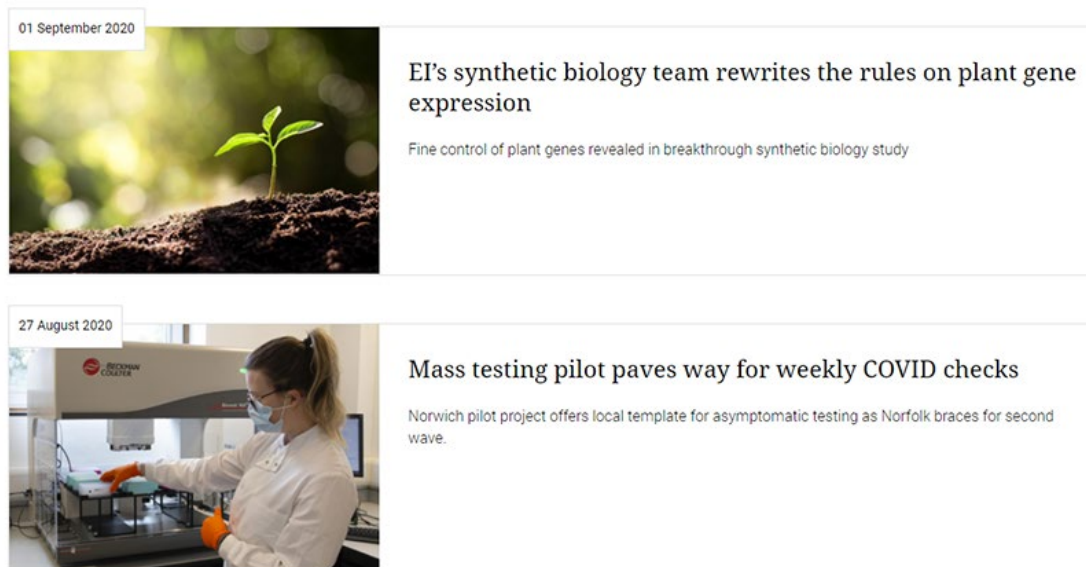
SOLUTION: Increase the contrast between the foreground (text) colour and the background colour.

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

```

```

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



Subscribe.

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.

12: PAGE TESTED: [HTTPS://WWW.EARLHAM.AC.UK/NEWSROOM/DNA-DECK-SHUFFLED-RAPID-CICHLID-EVOLUTION](https://www.earlham.ac.uk/newsroom/dna-deck-shuffled-rapid-cichlid-evolution)

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:

```

```

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



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

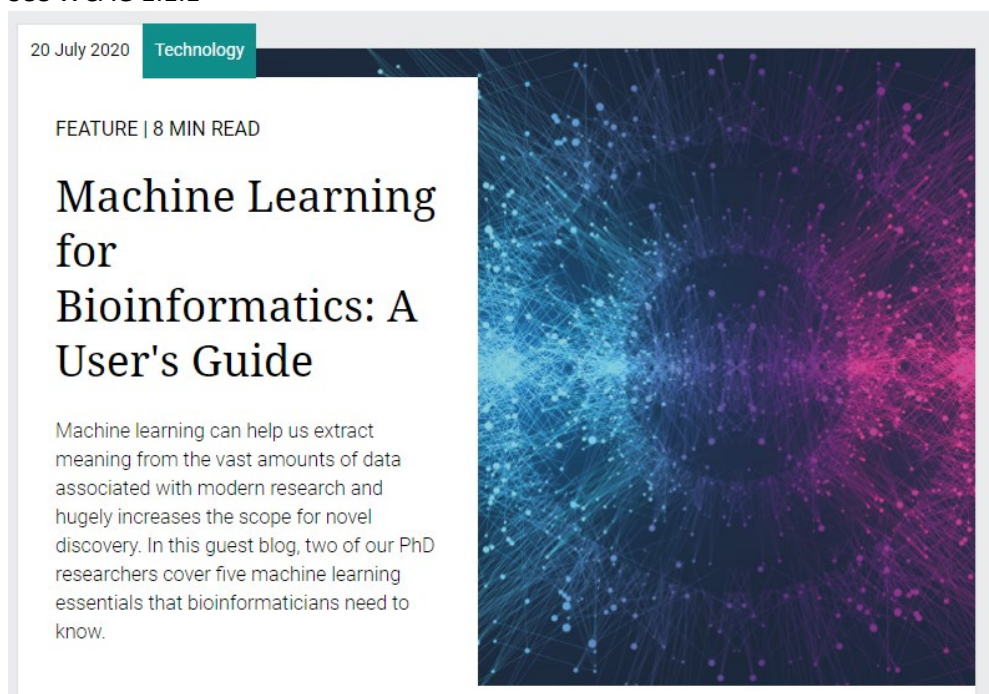
SOLUTION: Provide text within the link that describes the functionality and/or target of that link.

13: PAGE TESTED: [HTTPS://WWW.EARLHAM.AC.UK/ARTICLES](https://www.earlham.ac.uk/articles)

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

Example:

```

```

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.

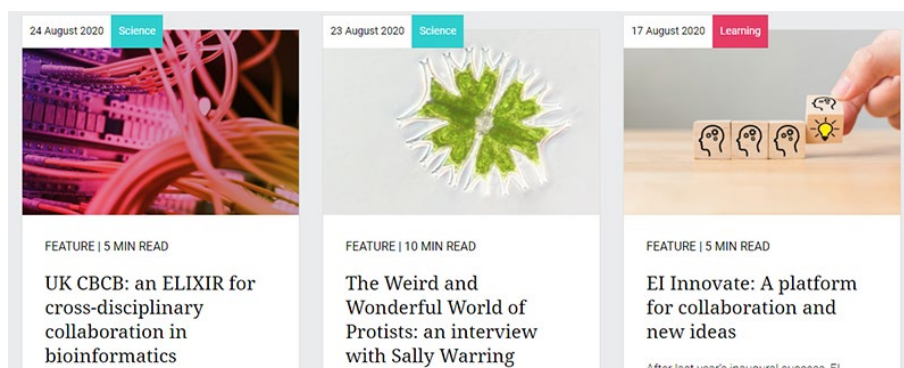
Example:

```
<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>
```

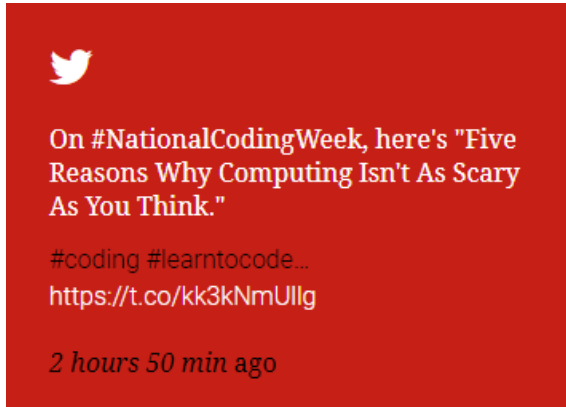
SOLUTION: Provide text within the link that describes the functionality and/or target of that link.

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



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

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](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

Contact the Business Development and Impact Group.

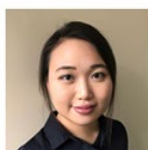
Get in touch 



Liliya Serazetdinova
Head of Business Development & Impact



Felicity Knowles
Business Development and Impact Officer



Nichola Wong
Business Development & Impact Officer



Kathryn Dugdale-Evans
Business Development and Impact Administrator




Article author

Peter Bickerton

Scientific Communications & Outreach Manager

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

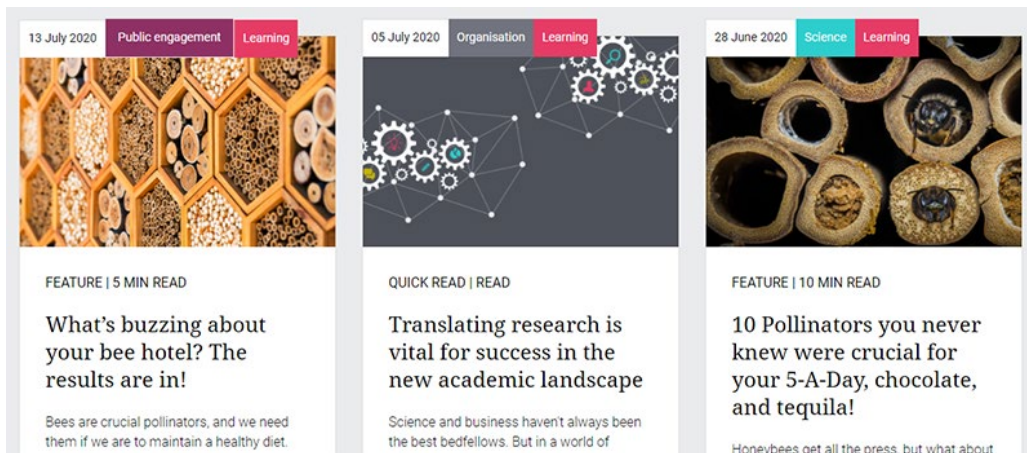
Example:

```

```

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

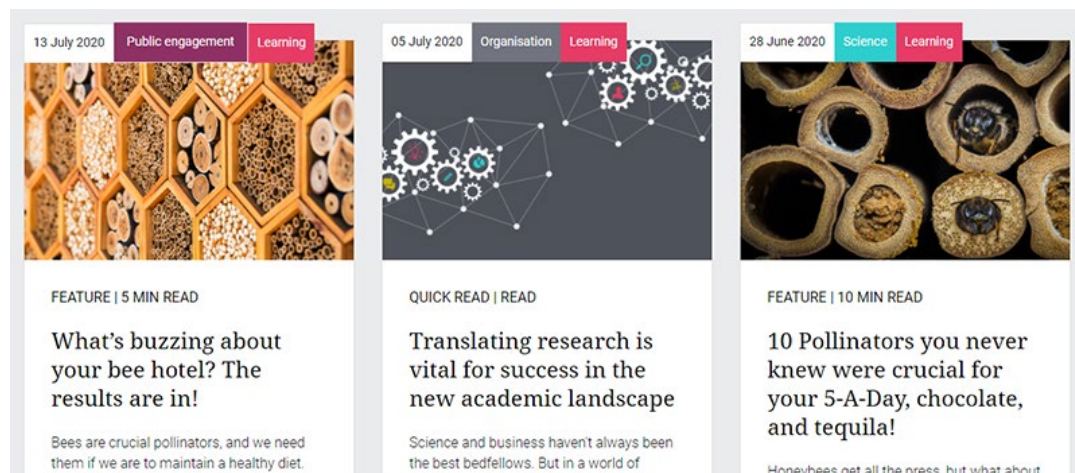


Example:

```
<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">
<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



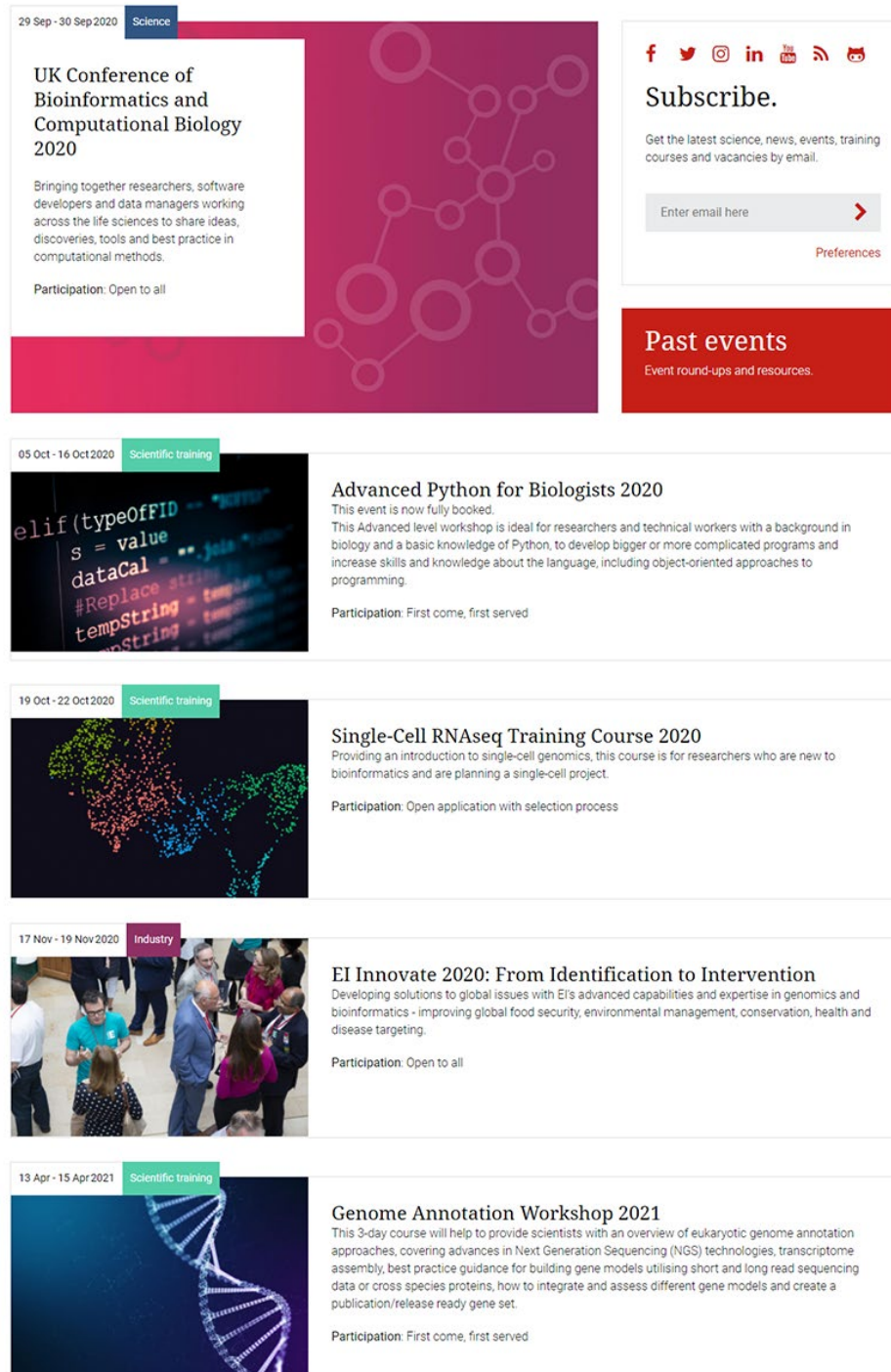
SOLUTION: Increase the contrast between the foreground (text) colour and the background colour.

15: PAGE TESTED: [HTTPS://WWW.EARLHAM.AC.UK/ARTICLES/EI-INNOVATE-PLATFORM-COLLABORATION-AND-NEW-IDEAS](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:

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



The screenshot displays the EI Innovate website. The main content area features a large featured event for the 'UK Conference of Bioinformatics and Computational Biology 2020' (29 Sep - 30 Sep 2020) with a description and participation details. Below this are three smaller event listings: 'Advanced Python for Biologists 2020' (05 Oct - 16 Oct 2020), 'Single-Cell RNAseq Training Course 2020' (19 Oct - 22 Oct 2020), and 'EI Innovate 2020: From Identification to Intervention' (17 Nov - 19 Nov 2020). A fourth event, 'Genome Annotation Workshop 2021' (13 Apr - 15 Apr 2021), is listed at the bottom. The right sidebar contains social media icons, a 'Subscribe' section with an email input field, and a 'Past events' section.

29 Sep - 30 Sep 2020 Science

UK Conference of Bioinformatics and Computational Biology 2020

Bringing together researchers, software developers and data managers working across the life sciences to share ideas, discoveries, tools and best practice in computational methods.

Participation: Open to all

05 Oct - 16 Oct 2020 Scientific training

Advanced Python for Biologists 2020

This event is now fully booked.

This Advanced level workshop is ideal for researchers and technical workers with a background in biology and a basic knowledge of Python, to develop bigger or more complicated programs and increase skills and knowledge about the language, including object-oriented approaches to programming.

Participation: First come, first served

19 Oct - 22 Oct 2020 Scientific training

Single-Cell RNAseq Training Course 2020

Providing an introduction to single-cell genomics, this course is for researchers who are new to bioinformatics and are planning a single-cell project.

Participation: Open application with selection process

17 Nov - 19 Nov 2020 Industry

EI Innovate 2020: From Identification to Intervention

Developing solutions to global issues with EI's advanced capabilities and expertise in genomics and bioinformatics - improving global food security, environmental management, conservation, health and disease targeting.

Participation: Open to all

13 Apr - 15 Apr 2021 Scientific training

Genome Annotation Workshop 2021

This 3-day course will help to provide scientists with an overview of eukaryotic genome annotation approaches, covering advances in Next Generation Sequencing (NGS) technologies, transcriptome assembly, best practice guidance for building gene models utilising short and long read sequencing data or cross species proteins, how to integrate and assess different gene models and create a publication/release ready gene set.

Participation: First come, first served

Subscribe.

Get the latest science, news, events, training courses and vacancies by email.

Enter email here

Preferences

Past events

Event round-ups and resources.

Example:

```

```

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



Subscribe.

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.

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.

16: PAGE TESTED: [HTTPS://WWW.EARLHAM.AC.UK/UK-CONFERENCE-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:

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.