



Performance Report for: <https://www.persephonebiosciences.com/>

Report generated: Mon, Mar 11, 2024 10:05 AM -0700
 Test Server Location: London, UK
 Using: Chrome 117.0.0.0, Lighthouse 11.0.0

B	Performance	Structure	L. Contentful Paint	T. Blocking Time	C. Layout Shift
	92%	80%	943ms	16ms	0

Top Issues

High	Avoid enormous network payloads <small>LCP</small>	Total size was 15.0MB
Med	Use explicit width and height on image elements <small>CLS</small>	4 images found
Low	Properly size images	Potential savings of 611KB
Low	Allow back/forward cache restoration	1 failure reason
Low	Eliminate render-blocking resources <small>FCP LCP</small>	Potential savings of 87ms

Page Details



Total Page Size - 15.0MB



Total Page Requests - 20



■ HTML
 ■ JS
 ■ CSS
 ■ IMG
 ■ Video
 ■ Font
 ■ Other

How does this affect me?

Today's web user expects a fast and seamless website experience. Delivering that fast experience can result in increased visits, conversions and overall happiness.

As if you didn't need more incentive, **Google has announced that they are using page speed in their ranking algorithm.**

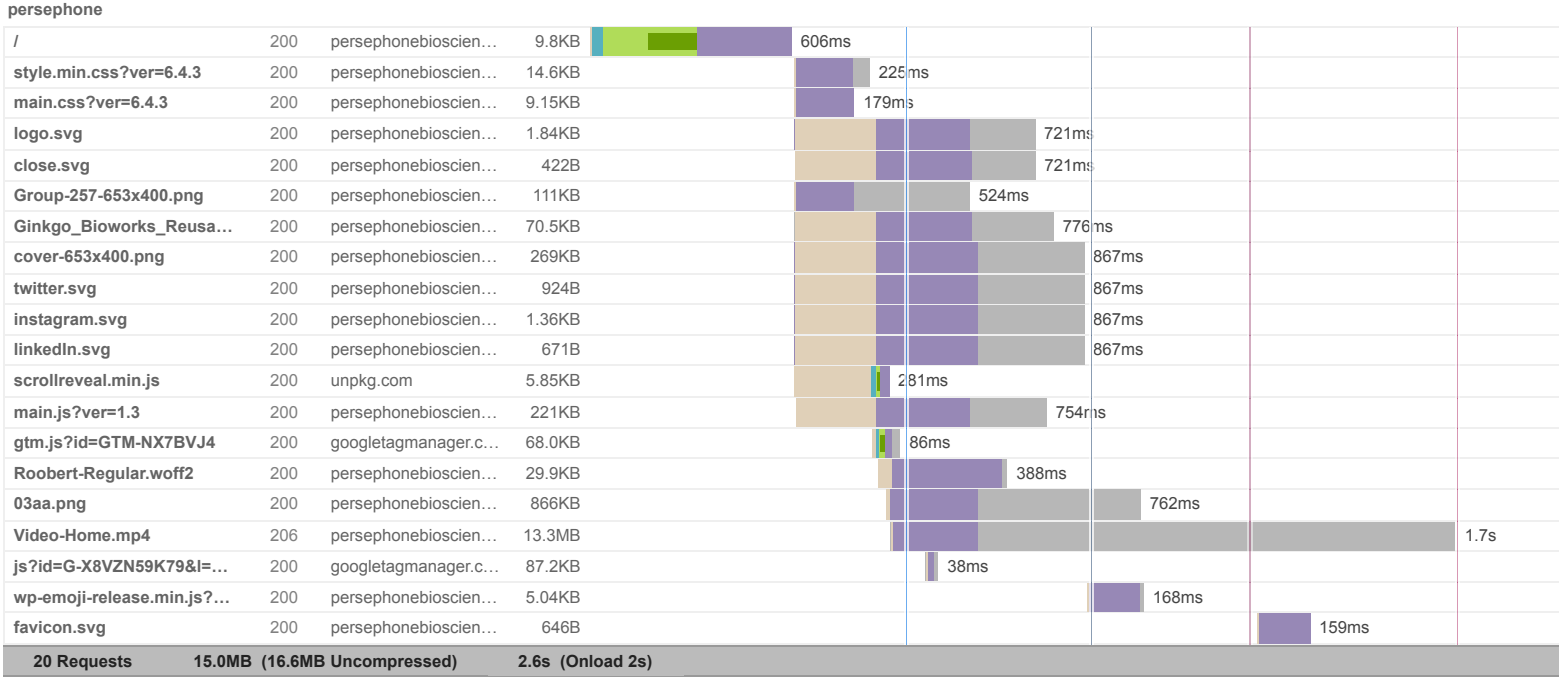
About GTmetrix

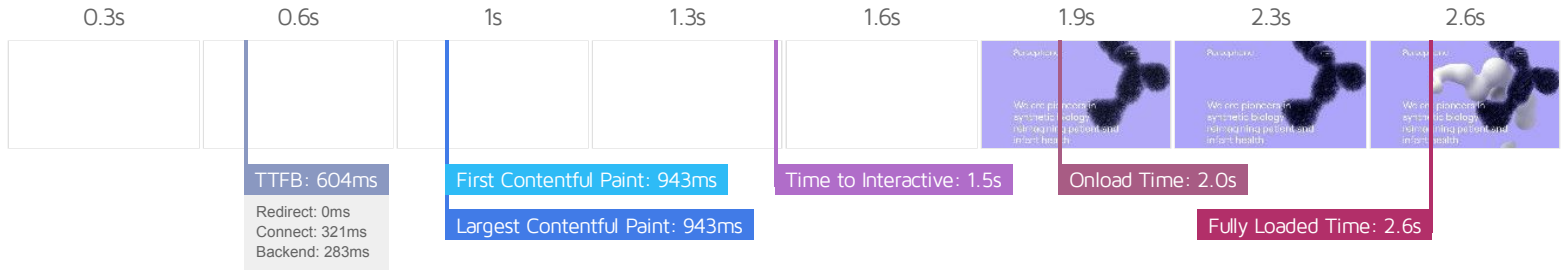


GTmetrix is developed by the good folks at **Carbon60**, a Canadian hosting company with over 28 years experience in web technology.

<https://carbon60.com/>

The waterfall chart displays the loading behaviour of your site in your selected browser. It can be used to discover simple issues such as 404's or more complex issues such as external resources blocking page rendering.





Performance Metrics

<p>First Contentful Paint</p> <p>How quickly content like text or images are painted onto your page. A good user experience is 0.9s or less.</p>	<p>OK, but consider improvement</p> <p>943ms</p>	<p>Time to Interactive</p> <p>How long it takes for your page to become fully interactive. A good user experience is 2.5s or less.</p>	<p>Good - Nothing to do here</p> <p>1.5s</p>
<p>Speed Index</p> <p>How quickly the contents of your page are visibly populated. A good user experience is 1.3s or less.</p>	<p>Much longer than recommended</p> <p>2.4s</p>	<p>Total Blocking Time</p> <p>How much time is blocked by scripts during your page loading process. A good user experience is 150ms or less.</p>	<p>Good - Nothing to do here</p> <p>16ms</p>
<p>Largest Contentful Paint</p> <p>How long it takes for the largest element of content (e.g. a hero image) to be painted on your page. A good user experience is 1.2s or less.</p>	<p>Good - Nothing to do here</p> <p>943ms</p>	<p>Cumulative Layout Shift</p> <p>How much your page's layout shifts as it loads. A good user experience is a score of 0.1 or less.</p>	<p>Good - Nothing to do here</p> <p>0</p>

Browser Timings

Redirect	0ms	Connect	321ms	Backend	283ms
TTFB	604ms	First Paint	943ms	DOM Int.	1.5s
DOM Loaded	1.5s	Onload	2.0s	Fully Loaded	2.6s

IMPACT AUDIT

Low **Defer offscreen images** Potential savings of 450KB

Consider lazy-loading offscreen and hidden images after all critical resources have finished loading to lower time to interactive.

URL	RESOURCE SIZE	POTENTIAL SAVINGS
https://www.persephonebiosciences.com/wp-content/uploads/2023/09/cover-653x400.png	269KB	269KB
https://www.persephonebiosciences.com/wp-content/uploads/2023/10/Group-257-653x400.png	111KB	111KB
https://www.persephonebiosciences.com/wp-content/uploads/2023/10/Ginkgo_Bioworks_Reusable_Bacteroides_Anarobic_Engineering_Toolkit.jpeg	70.5KB	70.5KB

Low **Reduce unused JavaScript** LCP Potential savings of 214KB

Reduce unused JavaScript and defer loading scripts until they are required to decrease bytes consumed by network activity.

URL	TRANSFER SIZE	POTENTIAL SAVINGS
https://www.persephonebiosciences.com/wp-content/themes/persephone/dist/main.js?ver=1.3	221KB	138KB
https://www.googletagmanager.com/gtag/js?id=G-X8VZN59K79&l=dataLayer&cx=c	87.3KB	41.5KB
https://www.googletagmanager.com/gtm.js?id=GTM-NX7BVJ4	68.4KB	34.7KB

Low **Serve images in next-gen formats** Potential savings of 1.13MB

Image formats like WebP and AVIF often provide better compression than PNG or JPEG, which means faster downloads and less data consumption.

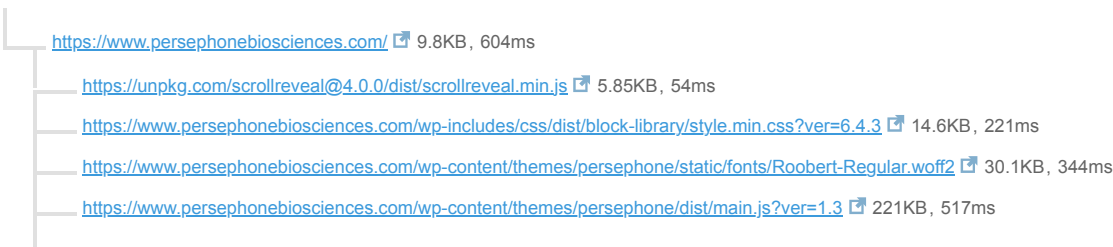
URL	RESOURCE SIZE	POTENTIAL SAVINGS
https://www.persephonebiosciences.com/wp-content/uploads/2022/04/03aa.png	866KB	786KB
https://www.persephonebiosciences.com/wp-content/uploads/2023/09/cover-653x400.png	269KB	243KB
https://www.persephonebiosciences.com/wp-content/uploads/2023/10/Group-257-653x400.png	111KB	90.8KB
https://www.persephonebiosciences.com/wp-content/uploads/2023/10/Ginkgo_Bioworks_Reusable_Bacteroides_Anarobic_Engineering_Toolkit.jpeg	70.5KB	40.9KB

Low **Avoid chaining critical requests** FCP LCP 5 chains found

The Critical Request Chains below show you what resources are loaded with a high priority. Consider reducing the length of chains, reducing the download size of resources, or deferring the download of unnecessary resources to improve page load.

Maximum critical path latency: **1.4s**

INITIAL NAVIGATION



Low Efficiently encode images Potential savings of 9.9KB

Optimized images load faster and consume less cellular data.

URL	RESOURCE SIZE	POTENTIAL SAVINGS
https://www.persephonebiosciences.com/wp-content/uploads/2023/10/Ginkgo_Bioworks_Reusable_Bacteroides_Anarobic_Engineering_Toolkit.jpeg	70.5KB	9.9KB

Low Avoid long main-thread tasks TBT 1 long task found

Lists the longest tasks on the main thread, useful for identifying worst contributors to input delay.

URL	START TIME	DURATION
https://www.persephonebiosciences.com/wp-content/themes/persephone/dist/main.js?ver=1.3	1.4s	66ms

Low Reduce unused CSS FCP LCP Potential savings of 14.6KB

Reduce unused rules from stylesheets and defer CSS not used for above-the-fold content to decrease bytes consumed by network activity.

URL	TRANSFER SIZE	POTENTIAL SAVINGS
https://www.persephonebiosciences.com/wp-includes/css/dist/block-library/style.min.css?ver=6.4.3	14.6KB	14.6KB

Low Reduce initial server response time FCP LCP Root document took 283ms

Keep the server response time for the main document short because all other requests depend on it.

URL	TIME SPENT
https://www.persephonebiosciences.com/	283ms

Low Minify JavaScript FCP LCP Potential savings of 59.3KB

Minifying JavaScript files can reduce payload sizes and script parse time.

URL	TRANSFER SIZE	POTENTIAL SAVINGS
https://www.persephonebiosciences.com/wp-content/themes/persephone/dist/main.js?ver=1.3	221KB	59.3KB

N/A Avoid an excessive DOM size TBT 187 elements

A large DOM will increase memory usage, cause longer style calculations, and produce costly layout reflows.

STATISTIC	ELEMENT	VALUE
Total DOM Elements		187
Maximum DOM Depth	div.menu-item__indicator > button.button > svg.mr-4 > path <path d="M0.319999 6.2L10.46 6.2L6.58 10.06L7.5 11L13 5.5L7.52 0.0200009L6.6 0.9400..." fill="white">	11
Maximum Child Elements	body.home <body class="home page-template page-template-template-home page-template-template-home..." style="height: 100%;">	10

N/A **Largest Contentful Paint element** LCP 940 ms

This is the largest contentful element painted within the viewport.

ELEMENT

```
We are pioneers in synthetic biology reimagining patient and infant health
<h1 class="hero__headline text-3xl md:text-4xl lg:text-5xl text-white font-sans">
```

PHASE	% OF LCP	TIMING
TTFB	64%	605ms
Load Delay	0%	0ms
Load Time	0%	0ms
Render Delay	36%	337ms

N/A **Reduce JavaScript execution time** TBT 96ms spent executing JavaScript

Consider reducing the time spent parsing, compiling, and executing JS. You may find delivering smaller JS payloads helps with this.

URL	TOTAL CPU TIME	SCRIPT EVALUATION	SCRIPT PARSE
• Unattributable	358ms	13ms	0ms
• https://www.persephonebiosciences.com/	134ms	12ms	1ms
• https://www.persephonebiosciences.com/wp-content/themes/persephone/dist/main.js?ver=1.3	86ms	49ms	19ms

N/A **Avoid serving legacy JavaScript to modern browsers** TBT Potential savings of 42B

Polyfills and transforms enable legacy browsers to use new JavaScript features. However, many aren't necessary for modern browsers. For your bundled JavaScript, adopt a modern script deployment strategy using module/nomodule feature detection to reduce the amount of code shipped to modern browsers, while retaining support for legacy browsers.

URL	POTENTIAL SAVINGS
https://www.persephonebiosciences.com/wp-content/themes/persephone/dist/main.js?ver=1.3	42B
Line:1252 Column:65	@babel/plugin-transform-classes
Line:2771 Column:14	@babel/plugin-transform-regenerat or

N/A

Avoid large layout shifts CLS

1 element found

These DOM elements contribute most to the CLS of the page.

ELEMENT

CLS CONTRIBUTION

We are pioneers in synthetic biology reimagining patient and infant health

```
<h1 class="hero__headline text-3xl md:text-4xl lg:text-5xl text-white font-sans">
```

0.00

N/A

Minimize main-thread work TBT

Main-thread busy for 683ms

Consider reducing the time spent parsing, compiling and executing JS. You may find delivering smaller JS payloads helps with this.

CATEGORY

TIME SPENT

Other

384ms

Script Evaluation

156ms

Style & Layout

72ms

Script Parsing & Compilation

32ms

Garbage Collection

16ms

Parse HTML & CSS

13ms

Rendering

8ms

N/A

Reduce the impact of third-party code TBT

Total size was 162KB

Third-party code can significantly impact load performance. Limit the number of redundant third-party providers and try to load third-party code after your page has primarily finished loading.

THIRD-PARTY

TRANSFER SIZE

MAIN-THREAD BLOCKING TIME

GOOGLE TAG MANAGER

156KB

0ms

- <https://www.googletagmanager.com/gtag/js?id=G-X8VZN59K79&l=dataLayer&cx=c>

87.3KB

0ms

- <https://www.googletagmanager.com/gtm.js?id=GTM-NX7BVJ4>

68.4KB

0ms

UNPKG

5.85KB

0ms

- <https://unpkg.com/scrollreveal@4.0.0/dist/scrollreveal.min.js>

5.85KB

0ms

N/A

User Timing marks and measures

No user timings and/or marks found.