

 supreme

- *the* -
ULTIMATE



LIFE SCIENCES SEO CHECKLIST

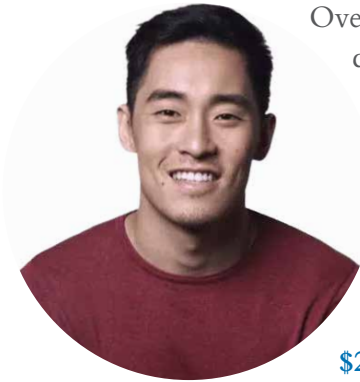
WRITTEN FOR LIFE SCIENCE, BIOTECHNOLOGY
AND MEDICAL DEVICE COMPANIES
BY PH.D. SCIENTISTS

www.supremeopti.com/life-science-seo-guide

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INTRODUCTION



Over the past 14 years, my team and I have consulted hundreds of life science companies ranging from startups to publicly listed companies. As a result, companies have received up to 100% increases in traffic in just the first few months after implementation. On-going SEO optimizations have resulted in increases of 500% or more of organic traffic to the website.

Supreme Optimization has maintained long term relationships in the life sciences field. We have helped grow many life science companies from small startups all the way to their IPO or acquisition such as [Charles River's 2021 \\$292m acquisition of Vigene Biosciences](#).

During this time, SEO has dramatically changed as search engines continue to improve their algorithms in order to deliver the most relevant search results. For us, this means always staying up to date with the latest information to provide to our clients.

However, it can be daunting to keep up to speed with search engine algorithm updates. At this point, there are [literally updates daily](#) across organic search engines and paid channels such as Google Ads.

Some of these are small updates to improve the user experience, other ones are significant enough to cause a company's website to be completely delisted from search results or severely penalized. For example, Google's "Mobilegeddon"—an update in 2015 forced companies to make their website fully mobile friendly. Companies that failed to update their site experienced drastic declines in keyword ranking and traffic. More recently, Google's "E-E-A-T" update in December 2022 continues to underscore the importance of user experience and creating original, helpful content.

Supreme Optimization's main goal is to provide as many free resources as possible for life science companies to do-it-yourself on the search engine optimization front. That's why we've taken the time to comprehensively list out everything that you should consider when you are optimizing your website for search engines. These tips apply to a brand new website or an existing website. Additionally, there are numerous life science company-specific tips different from any other SEO checklist you'll find anywhere else.

Without further ado, let's begin. One more note... if you get caught along the way, we are here to offer absolutely free email support. [Contact us here](#) to clarify any points specific to your situation. Good luck!

Check off items as you go along.

(Note: Not all of these items may apply to your situation)

MEET THE AUTHORS:

WRITTEN FOR LIFE SCIENCE, BIOTECHNOLOGY AND MEDICAL DEVICE COMPANIES BY PH.D. SCIENTISTS



Sheldon Zhai

FOUNDER, CHIEF EXECUTIVE OFFICER

Sheldon has always had a passion for science, marketing, and technology. At the age of 12, he sold self-assembled computers online and later honed his skills in a molecular biology lab at the University of Wisconsin – Madison. His entrepreneurial zeal led to the creation of Supreme Optimization, the first digital marketing agency for life science companies. Under his visionary leadership, the Supreme Team has helped hundreds of companies get better results online. His achievements and industry insights, which have been widely disseminated through numerous articles, helped earn him the recognition as a Forbes 30 Under 30 honoree in 2019.



Lauren Whitehead, Ph.D.

DIRECTOR OF DIGITAL STRATEGY

Lauren has over 6 years of research experience in the field of immunology. She obtained her Ph.D. in Medical Science from the University of Aberdeen and has contributed to several publications including publications in prestigious journals like Nature Reviews Immunology. Lauren applies her scientific expertise and creative flair at Supreme, where she excels in guiding clients to develop top-notch websites designed to drive organic traffic, leads and ultimately revenue.



Megan Waldman, Ph.D.

DIRECTOR OF CONTENT STRATEGY

Megan has over 6 years of research experience in the field of epigenetic engineering and organic synthesis. She obtained her Ph.D. in Human Genetics from the University of Pittsburgh and has contributed to the commercialization, tech transfer, and scientific communication strategy of numerous life science and health care companies. Megan's scientific expertise, business acumen, and creative puzzle solving is indispensable at Supreme, where she passionately guides clients to develop organization-wide positioning and effective content strategies -- designed to create demand, generate quality leads, and ultimately revenue.

THE INITIAL SETUP AND AUDIT

The initial setup will help you get started with vital analytical tools that will serve you for the life of your website. These are highly important in determining the long-term health of the website as measured by search engines.

❑ 1. Have you installed the latest version of Google Analytics (GA4)?

To do so, follow the [instructions here for setup](#). Note: As of July 1, 2023 Google has replaced Universal Analytics with Google Analytics 4. Using Google's latest free platform will help you track all incoming traffic to your website, analyze behavior of customers, determine ROI of specific media buying campaigns and retarget to customers who visit your website.

❑ 2. Have you installed Google Search Console?

To do so, follow the [instructions here for setup](#). This will notify Google of your new website and help it understand your site structure and help you keep the site healthy overall. Check for 404/500 errors, manual actions, duplicate content, missing titles and other technical errors and stay up to date on the notices that Google sends to the linked account email.

❑ 3. Have you installed Bing Webmaster Tools?

To do so, follow the [instructions here for setup](#). This will help you notify Bing of your new website, help Bing understand your site structure, ensure there are no penalties, target specific regions, and keep the site healthy overall.

❑ 4. If you are using WordPress, have you installed Yoast SEO Plugin?

This will make your life easier by allowing you to edit title tags, description tags, image alternate tags and other important code modifications related to SEO.

❑ 5. Crawl your entire website for site errors using Moz to identify technical issues.

Membership to one of the best SEO crawl software, Moz, starts at \$99/mo, however you can [reach out to us](#) to get access to a site crawl for free. Alternatively, [ScreamingFrog SEO Tool](#) provides a semi-free option for the first 500 pages. These tools will help you check your site for technical issues that may result in penalties by search engines.

❑ 6. Have you created an XML sitemap and submitted it to Google and Bing Webmaster Tools?

Use [XML-Sitemaps.com](#) or the Google XML Sitemaps WordPress Plugin (you can also use the Yoast SEO Plugin mentioned above) to generate a sitemap. Submit the sitemap to Google Search Console and Bing Webmaster Tools to help search engines find all the pages on your site.

❑ 7. Have you created a Robots.txt file and submitted it in Google and Bing Webmaster Tools?

Help Google understand which pages to crawl and which pages NOT to crawl on your site with a robots.txt file. Follow the instructions on how to [create a robots.txt file](#) with the Yoast SEO Plugin.

KEYWORD RESEARCH

FOR LIFE SCIENCES COMPANIES

Selecting quality keywords for life science companies is significantly more challenging than many other industries. The reason for this is because within life sciences there are many sub-fields targeting a variety of completely different audiences. For example, a large scale cGMP company is not going to be targeting the same audience as a commodity driven antibody company. Alternatively, oftentimes one company might have both a clinical division as well as a research products division. Therefore, they are targeting two very different audiences with both their keywords and website.

To top it off, unlike many other industries, there is a large amount of online traffic coming from academics (eg. undergraduate biochemistry students) searching for broad keywords such as ‘monoclonal antibody’ or ‘CRISPR’ just to learn more. In comparison, someone Googling, ‘shoes’ in the consumer commodities market, has a much higher relevancy rate for a B2C shoe company. In short, focusing your time on optimizing for only ‘sequencing’ when your company sells RNA sequencing instrumentation or services probably isn’t the right keyword.

❑ **8. Utilize Google Keyword Planner to search for keyword suggestions.**

❑ **9. Utilize [Mangools KWFinder](#) (starting from \$19.90/mo) to find long tail keywords to target as well as utilize for future content marketing/paid advertising.**

❑ **10. Analyze the keyword suggestions, and select a target keyword (or related group of keywords) for each webpage. The keywords that you select will depend on 4 factors:**

- Average Monthly Search Traffic
- Relevance
- Search Engine Competition
- Your Current Rankings

A LIFE SCIENCE KEYWORD RESEARCH EXAMPLE:

Search Traffic

This factor is obvious. The higher the monthly search traffic, the better. Consider the keyphrases below:

Keyword	Avg. Monthly Searches
alkaline phosphatase	307,000
alkaline phosphatase staining	480

Fig 1. A comparison of high traffic keywords versus relevancy.

“Alkaline phosphatase” has by far the most traffic, so it is the obvious one to pick. Right? Well, actually a life science specific SEO specialist may consider picking “alkaline phosphatase staining” depending upon the relevance of the keywords to the page that is being optimized...

Relevance

Sure, targeting the keyword with the most monthly search traffic seems appealing, but how relevant is that keyword to the page you are optimizing? In the above case, if you were optimizing a page

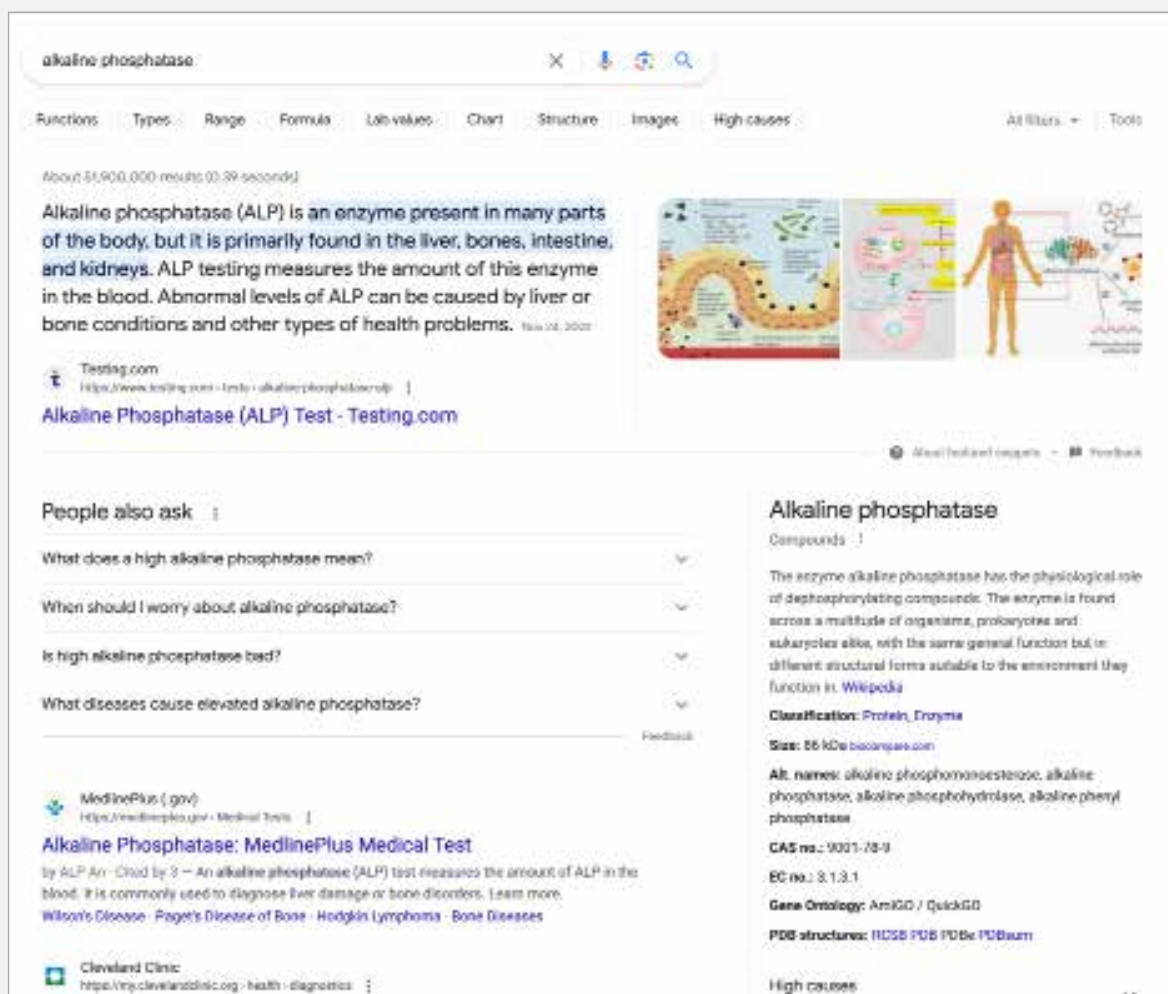


Fig 2. Google algorithmically ranks organic searches by searcher intent.

of Alkaline Phosphatase Staining Kits, then a keyword like “alkaline phosphatase” would be far too general.

One of the major things to consider when choosing a keyword is the searcher’s intent. What is the searcher looking for when he/she searches “alkaline phosphatase”? A good assumption would be that they are looking for general information about the compound and enzyme. A look at the Google SERPs will tell you more:

As suspected, the top result is a page with general information about the enzyme. The remainder of the first page results are pages about the ALP Test, which are not relevant to staining kits.

Google has done an excellent job at configuring its algorithm to show search results that match the information that the searcher is looking for. The above results indicate that users searching “alkaline phosphatase” are not looking for alkaline phosphatase staining kits. As a result, if these searchers landed on a staining kits page, they would click back or bounce to find the information they are looking for. A high bounce rate will result in lower rankings (more on that in later points).

Consequently, it would be wiser to pick a more relevant keyword like “alkaline phosphatase staining”.

It may even be worth considering targeting a longer tail keyword like “alkaline phosphatase staining kit” or an abbreviated keyword like “ALP staining kit” which has only 50 searches/month. Of course this is very low traffic. But again, think about the searcher intent! A user searching for this keyword is clearly looking to buy a staining kit. Ranking number 1 for this keyword could be way more valuable than ranking for “alkaline phosphatase staining”, where searchers may in fact be looking for the staining method or protocol.

Which keyword you choose out of the two would be a matter of preference, but there are 2 more major factors that will help with your decision...

Search Engine Competition

When choosing between a selection of keywords, checking the competition in the search engines is a key step. An easy way to measure yourself against your competition is by checking your Domain Authority against theirs.

Domain Authority (DA), in a nutshell, is a score out of 100 based on an algorithm developed by **Moz**. It shows your likeliness to rank for a keyword. You can read more about DA [here](#).

You can check the DA of each competitor in the search results manually using a tool like the **Domain Authority Checker**. A seamless way is by using the **Moz SEO Toolbar**.

If you have a website with a DA of around 20-30, and all page 1 results for your target keyword have DA 60+ (as search engine dominant companies like Thermofisher, Sigma and Abcam do), then it is not likely that you will rank if the content you produce is similar to theirs. If they are not effectively optimizing their content for the target keyword however, or you know that your content is going to be significantly better, you could be in with a chance.

If a competitor with a low DA is ranking on the 1st page, then go check out their content and learn why they are ranking.

Current Rankings

The next thing to check is where your domain is currently ranking. The best and quickest tool for this is **SEMrush**.

If you are currently ranking #12 for a keyword that you are not optimized for, then optimizing for this keyword will likely push you to page 1.

Another reason to check your current rankings is because another page on your website could already be ranking. If this is the case then you may not want to disturb that ranking and create competition by optimizing another page for the same keyword.

A LIFE SCIENCE EXAMPLE

Our client **Vector Labs** wanted to rank the below Lectins page for the keyword “lectins”, which has an avg search traffic of 14,800. Pretty good!

We found that Vector’s Lectins and Glycobiology Reagents page was already ranking #12 for “lectins” and therefore this page (rather than the Lectins page) should be optimized for that keyword instead to push it to page 1.

Considering the Lectins page was in fact a page for Lectin Binding Assay products, we chose to optimize the page for the very relevant keyword “lectin binding assays”. This keyword only has 20 searches/mo, but these are searchers looking to buy these assays.

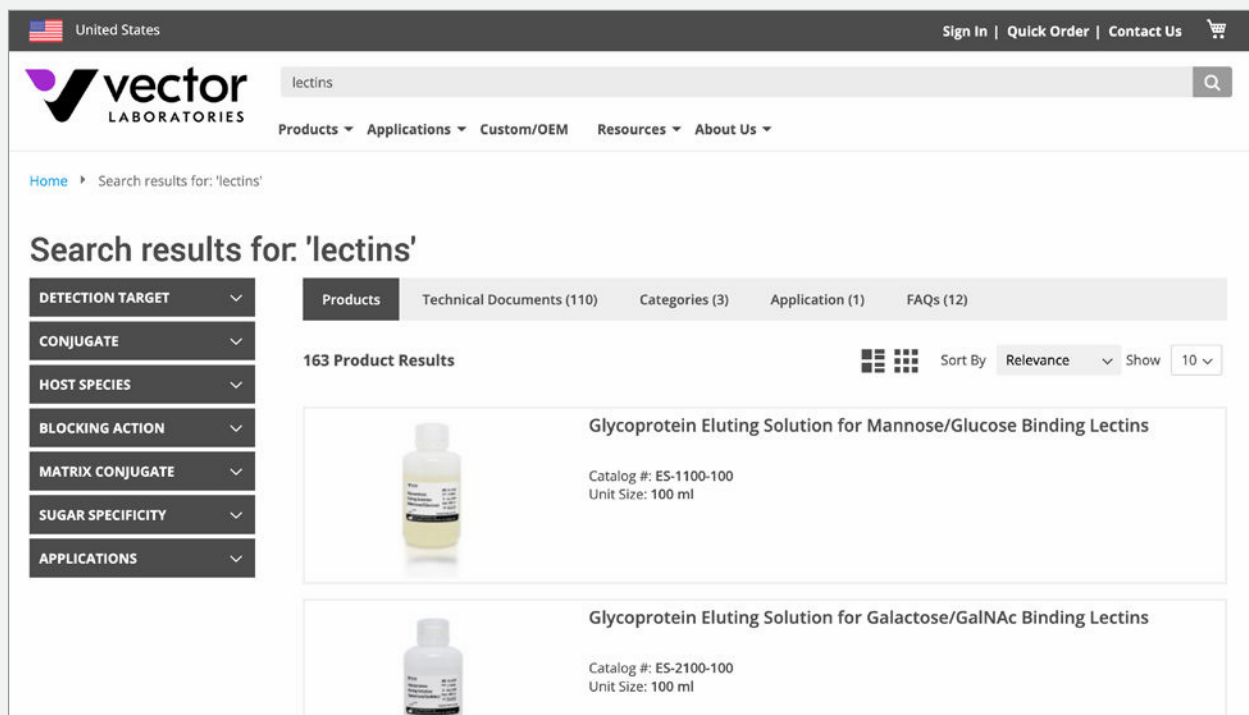


Fig 3. An example with VectorLabs and preventing keyword cannibalization.

11. Create a keyword map across your content.

This will help you to build a base of content designed around contextually relevant and interconnected topics. Similar to building a house, you can build your SEO bricks by:

1. Defining the requirements of what your house needs to have.
2. Design a blueprint to figure out where things will be built.
3. Develop the structures needed to support your requirements.
4. You can learn more on how to create a structured keyword map across all of your content by [reading this guide](#).

Products									
2		3		4		5		6	
COVID-19		Antibodies		ELISA Kits		PCR Kits		Binding Assays	
Primary Keyword	COVID 19 Products	Primary Keyword	polyclonal antibodies covid 19 (ranking 3rd)	Primary Keyword	covid-19 elisa kit	Primary Keyword	covid pcr kit covid 19 pcr kit	Primary Keyword	n/a
Secondary Keyword	n/a	Secondary Keyword	polyclonal antibodies for covid	Secondary Keyword	elisa covid-19	Secondary Keyword	pcr kit for covid-19	Secondary Keyword	n/a
Keyword	Monthly Search Vol.	Keyword	Monthly Search Vol.	Keyword	Monthly Search Vol.	Keyword	Monthly Search Vol.	Keyword	Monthly Search Vol.
COVID-19		polyclonal antibodies covid 19 (ranking 3rd)	140	elisa covid-19	170	covid pcr kit	50 (ranking 5th)	covid-19 binding assays semrush and kwfinder	0
covid-19 research products	0	polyclonal antibodies for covid	110	covid-19 elisa kit	10	pcr kit for covid-19	30	covid 19 binding assay	0
covid 19 research tests	0	covid 19 antibodies research	210 (wrong niche)	covid 19 elisa	10	covid 19 pcr kit	10	inhibitor screening elisa kits	0
covid 19 products and services	0			elisa kit for covid 19	0			in vitro screening assays	0
covid 19 products								spike protein binding assay	0
used semrush magic tool	170								

Fig 4. An example of a keyword map template.



“Sheldon here. Do you want to hear how our PhD team of content writers and marketers can improve SEO for your company?”

Let’s set-up a time to chat. [Fill out this form](#) on our website and indicate ‘SEO Checklist’ to get the conversation started.”

ON PAGE CONTENT OPTIMIZATION

FOR LIFE SCIENCES COMPANIES

Having enough quality content is extremely important for a website's ranking potential. Unfortunately, oftentimes, life science companies face the issue of clearly communicating the complex. Researchers are well aware that journals and peer reviewed articles must leave no details unturned. However, this conflicts with basic principles for effective marketing. Content needs to be presented clearly and concisely with a focus on the user.

Generally, many life science companies have numerous products and services that include complex technical specifications, case studies, protocols, product information, and more. In order to simplify the website and reduce clutter, companies cut down or misplace SEO-beneficial content. As a result, some of the best content for search engine ranking potential is stored away in hard to index tabs or PDF documents that bear little to no impact on ranking potential for search engines.

In the ever-evolving landscape of digital marketing and SEO, Google's E-E-A-T guidelines have become increasingly important to rank well. **E-E-A-T stands for Expertise, Experience, Authoritativeness, and Trustworthiness.** These factors are not just buzzwords but critical elements for any website aiming to rank well in Google's search engine results.

EXPERTISE: Your content should be crafted by individuals with a strong background in the field, be it biotechnology, pharmaceuticals, or medical devices. This ensures that the information you disseminate is not only accurate but also insightful.

EXPERIENCE: User experience (UX) has become a significant ranking factor for Google. This involves the overall experience a visitor has when interacting with your website. Factors like site speed, mobile-friendliness, ease of navigation, and content layout all contribute to the user experience.

AUTHORITATIVENESS: Being authoritative extends beyond expertise; it involves earning recognition from others in your industry. This can be demonstrated through high-quality backlinks from reputable sites, citations, and high user engagement. Reviews and testimonials can also serve as social proof of your site's authoritativeness.

TRUSTWORTHINESS: Your website should not only provide accurate and reliable information but also secure user data effectively. This includes having a secure HTTPS website and transparent privacy policies. More on this in the Technical issues chapter.

Later, we will examine the ideal site architecture structure to maximize ranking potential. Most importantly, content must be laid out strategically utilizing an effective keyword map.

12. URLs are descriptive and optimized.

Ensure that your URLs are descriptive and optimized for your products or services. This means that if too many of your URLs are dynamically generated or with session IDs, they should be updated to something easier for humans to read and ideally incorporate your target keyword.

A LIFE SCIENCE EXAMPLE

Before: http://www.biotech.com/index.php?main_page=index&cPath=211_259

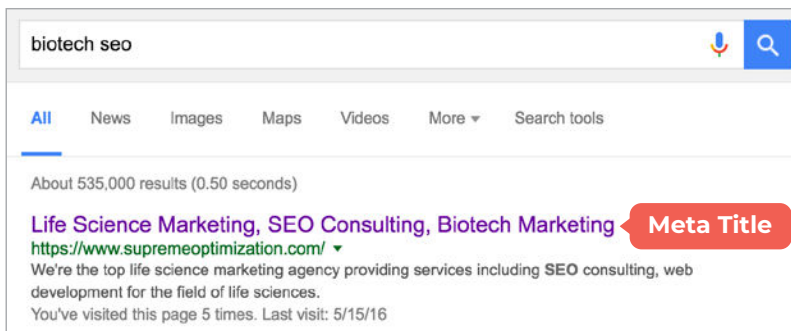
After: <http://www.biotech.com/services/knock-in-mice/>

Fig 5. Dynamic URLs versus the preferred Static URLs

13. Title tags are optimized.

Title tags are pieces of code on a webpage often used on search engine results pages (SERPs) to display preview snippets for a given page.

Title tags should be optimized and unique. It should include your targeted keywords assigned to the page. Title tags should not target the same keyword for multiple pages because this results in your



Code Sample:

```
<head>
<title>Example
Title</title>
</head>
```

Fig 6. Meta title tags are what appear above your website's URL on Google Organic Search.

website's own pages competing with each other for ranking positions. See [SEMrush's guide on preventing keyword cannibalization](#). Google, in turn, is confused about which page to rank for what keyword and ends up ranking neither.

Additionally, your brand name should be included in your title tag to improve click-through rates. Title tags should be between 50–60 characters (512 pixels) to be fully displayed. You can test or review title pixel widths in [Mangools SERP simulator](#).

An example of an ideal homepage title tag for a company that focuses on CRISPR services and knock in-mice would be:

CRISPR Services, Knock-In Mice | Company Brand Name

□ 14. Optimize your meta descriptions for click-through-rates.

Meta descriptions are what show up directly on Google's search results. They are one of your company's best opportunities at improving click through rate.

A well written meta description should provide a clear unique value proposition for why a potential customer should view your offerings rather than a competitor's website ranking next to yours.

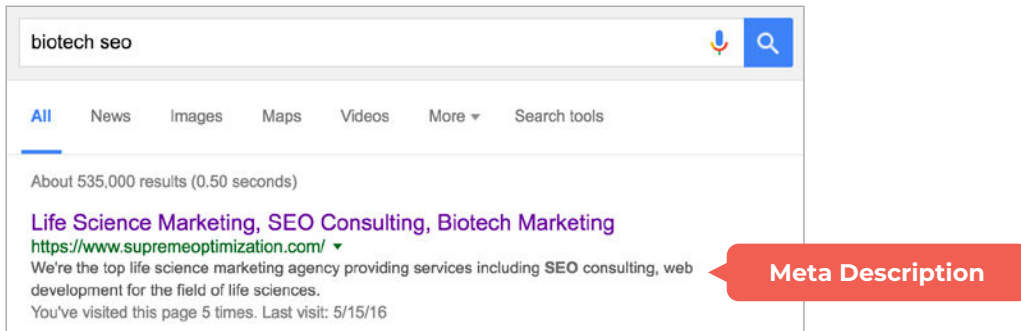


Fig 7. An example of an optimized image alt tag as seen in a site's HTML.

Code Sample:

```
<head>  
<meta name="description" content="This is an example of a meta description.  
This will often show up in search results.">  
</head>
```

Pro tip: Describing your products or services as 'high quality' is not a comparative advantage versus your competitors. Even the competitor providing the lowest quality products will write 'high quality.'

□ 15. Check for pages missing page titles and meta descriptions.

In the Moz Crawl Report requested in the 'Initial Setup and Audit' section, you will see a list of all missing page titles and meta descriptions. These should be updated for all pages on your website to help guide search engines to navigate your site and index it appropriately.

□ 16. The primary keyword phrase is contained in the H1 tag.

Placing your primary keyword phrase in the H1 tag will provide an extra boost for your rankings.

□ 17. The on-page content includes the primary keyword phrase multiple times as well as variations and alternate keyword phrases.

As a rule of thumb, include your primary keyword phrase and permutations of it up to five times on each page. Luckily most life science websites are thin on quality landing page content. A client competing for a highly competitive revenue driving keyword, 'Custom Monoclonal Antibodies'

drafted an additional 400 words of content describing their services. As a result, they moved up to the #1 spot on Google rankings for many years and directly attributed hundreds of thousands of dollars of additional revenue because of it. This brings us to our next point.

18. Ensure there is a significant amount of optimized, unique content on key pages.

Each key product or service page should provide a significant amount of optimized unique content. Up to five hundred words of content with diagrams is a good benchmark however longer content may be required to effectively target more competitive keywords. Creating quality content that is appropriate for your target audience is a vital part of following Google's E-E-A-T guidelines and being able to rank well.

19. Create product categories with unique content to group products with similar attributes.

For product pages, there should be a main parent product page for each group of child products. This is especially important for life science companies because many companies segment products by product type. If there is not a parent page for a product family, then Google will struggle to index your website for the correct keywords, nor will you be able to run effective Google Ads campaigns to the website

20. Image filenames and alt text are optimized to include the primary keyword phrase associated with the page.

Each image can have a piece of code embedded within the image. If your company has numerous images on your website that illustrate your services or products, it's important to add an image alt tag.

AN OPTIMIZED LIFE SCIENCE PAGE

We recently received a lead that was wondering why their website wasn't ranking for the keyword "ELISA kits."

```
arsys_column cq-colctrl-1t3-cl"><div class="parbase  
ays-analysis/elisa/elisa_kits/igr:content/MainParsys  
n ELISA Kit" alt="Human Insulin ELISA Kit" cla  
ainParsys/well_6000/uipar/image_58d7.jpg/1436968
```

Image alt tag

Fig 8. An example of an optimized image alt tag as seen in a site's HTML.

Our answer: There is no dedicated page targeting the keyword "ELISA kits" that can be optimized. These products are only listed on this search listing page. A dedicated page for ELISA Kits should be created to optimize for this keyword with relevant, unique content.

What is ranking and why?

Let's take a look....

Cell Signaling TECHNOLOGY

PRODUCTS | APPLICATIONS | RESEARCH | PATHWAYS | SERVICES | LEARN & SUPPORT | ABOUT US

1% FOR THE PLANET

Search by keyword

Product Search

Products (412) Resources (1319)

Filters [Clear all](#) Sort by Relevance

Applied Product Category ELISA Kits (412)

#	Product Name	Applications	Reactivity
29666	FastScan™ Cas9 (<i>S. pyogenes</i>) ELISA Kit	WB IP IHC IF F ChIP	All <input type="checkbox"/> COMPARE
12001	PathScan® Phospho-SMAD2 (Ser465/467)/SMAD3 (Ser423/425) Sandwich ELISA Kit	WB IP IHC IF F ChIP	H, M, Mi <input type="checkbox"/> COMPARE
30794	FastScan™ Phospho-SLP-76 (Ser376) ELISA Kit	WB IP IHC IF F ChIP	H, M <input type="checkbox"/> COMPARE
7300	PathScan® Phospho-Stat3 (Tyr705) Sandwich ELISA Kit	WB IP IHC IF F ChIP	H, M, R, Mk <input type="checkbox"/> COMPARE

[Fewer filters](#)

Fig 9. An example of a parent category page without substantial content.

https://www.thermofisher.com/ca/en/home/life-science/protein-biology/protein-assays-analysis/elisa/elisa-kits.html

Cimatec+ hotplate stirrers: Buy 2, get 1 free. [Get details](#)

ThermoFisher SCIENTIFIC

Contact Us | Sign In | Quick Order

Applications & Techniques | Shop All Products | Services & Support | About Us | Cloud

Home > Life Sciences > Protein Biology > Protein Assays and Analysis > ELISA > ELISA Kits

ELISA Kits

ELISA

- Neurobiology ELISA Kits
- Phospho-Specific ELISA Kits
- Cytokine ELISA Kits
- Find ELISA Kits by Target
- Guide to ELISA Kit Sizes and Formats
- In-Cell ELISA Kits
- ELISA References
- ELISA Validation and Quality Testing

ELISA Reagents and Accessories
ELISA Enzyme Substrates Selection Guide
Antibody Pair Kits

This extensive portfolio includes over 800 ready-to-use ELISA kits and is optimized for convenient and sensitive quantitation of a wide range of targets in various sample types, including human, mouse, rat IgG, cytokines, phosphorylated proteins, beta amyloids, extracellular and intracellular targets. These ELISA kits include pre-coated plates with capture/detection antibodies, standards, and buffers and accessory reagents.

[Find ELISA kits by target](#)

[See new ELISA kits launched this month](#)

Popular ELISA kit products

- [Amyloid beta 40 ELISA Kit, Human](#)
- [Insulin ELISA Kit, Human](#)
- [c-Myc \(total\) ELISA Kit, Human](#)

At the time of making this guide, the top company to rank for “ELISA kits” in Google is ThermoFisher.

This page is perfectly optimized

<https://www.thermofisher.com/ca/en/home/life-science/protein-biology/protein-assays-analysis/elisa/elisa-kits.html>

ELISA Kits | Thermo Fisher Scientific

<https://www.thermofisher.com/us/en/.../elisa/elisa-kits.html> ▼ Thermo Fisher Scientific ▼
ELISA Kits. This extensive portfolio includes over 800 ready-to-use ELISA kits and is optimized for convenient and sensitive quantitation of a wide range of targets in various sample types, including human, mouse, rat IgG, cytokines, phosphorylated proteins, beta amyloids, extracellular and intracellular targets.

URL incorporates keyword

Page Title incorporates keyword

ELISA Kits | Thermo Fisher Scientific

<https://www.thermofisher.com/us/en/.../elisa/elisa-kits.html> ▼ Thermo Fisher Scientific ▼
ELISA Kits. This extensive portfolio includes over 800 ready-to-use ELISA kits and is optimized for convenient and sensitive quantitation of a wide range of targets in various sample types, including human, mouse, rat IgG, cytokines, phosphorylated proteins, beta amyloids, extracellular and intracellular targets.

Optimized meta description

Keyword rich content

Cytokine and Extracellular ELISA Kits

Extensive portfolio of over 700 cytokine, chemokine, interleukin, and extracellular ELISA kits, covering a broad range of targets in several species and various sample types.

In-Cell ELISA Kits

Colorimetric and near infrared detection kits for simple and convenient methods for the quantification of intracellular protein levels in whole cells.

Watch ELISA kits in action

Novex ELISA Kits



Thermo Scientific ELISA Kits



ELISA kit features

The extensive ELISA kit portfolio ranges from high-quality neurobiology-related and phospho-specific ELISA kits to a broad menu of cytokine/chemokine ELISA kits.

ELISA kits help provide accurate and sensitive and consistent results. Each target protein is researched and the kits are calibrated to provide physiologically relevant sensitivity. In addition, kits are validated using common sample types, including serum, plasma and cell culture supernatant. Cell lysates are used to validate kits that detect signaling proteins or phosphorylation.

Our ELISA kits must meet rigorous quality-control specifications and are manufactured in an ISO facility with stringent quality

```
parsys_column cq-colctrl-lt3-cl"><div class="parbase  
says-analysis/elisa/elisa-kits/jcr:content/MainParsys  
in ELISA Kit" alt="Human Insulin ELISA Kit" class="cq  
MainParsys/well_8d00v/ulpar/image_58a7.imgq/1436968
```

Optimized images with alt attributes

Fig 10. An example of a fantastic parent category page that has substantial, relevant content.

□ 21. Homepage content is optimized.

Your homepage should contain at least one paragraph utilizing your revenue driving keywords. There should be enough content on the page to give search engines an understanding of what the page and website as a whole is about. 150 or more words is the minimum recommended amount.

□ 22. Are there pages targeting mid-tail and long-tail keywords?

Prevent keyword cannibalization across your pages by correctly targeting multiple variations of your designated keyword. Use a keyword map to map out unique keywords across categories, products and service pages.

□ 23. Ensure content helps users to convert and is highly functional.

In addition to search engine driven content, there should be content to help educate users about the product or service. Utilize the best [copywriting guide](#) to help you structure your content in a way that drives a customer down a natural funnel leading to a desired action.

Just a few examples include: AIDA, (Attention, Interest, Desire, Action) and our personal favorite for homepages in particular: AICPBSAWN.

- Attention – Biggest benefit, biggest problem you can solve, USP
 - Interest – Reason why they should be interested in what you have to say
 - Credibility – Reason why they should believe you
 - Proof – Prove what you are claiming is true
 - Benefits – List them all
 - Scarcity – Create scarcity
 - Action – Tell them precisely what to do
 - Warn – What will happen if they don't take action
 - Now – Motivate them to take action now
-

□ 24. Create good headlines on blog posts.

Good headlines go a long way. Make sure the headlines are well written and capture users attention. Utilize this brilliant [guide by Copyhackers](#) to craft engaging headlines. “Pro Tip: Use ChatGPT to brainstorm catchy headlines that help draw users in.”

□ 25. Amount of content versus ads.

Since the implementation of Google's Panda algorithm update in 2011, the amount of ad space on a page has become important to evaluate. Make sure there is significant unique content above the fold. If you have more ads than unique content, you are probably going to have a problem.

□ 26. Are you linking to your internal pages in an SEO-friendly way?

Are you describing the page you're linking to in the anchor text, so that both users and search engines understand what it's about? We recommend not using anchor text in your global navigation because it can look like over-optimization. Stick to in-content links instead.

LINK BUILDING & LINK HEALTH

27. Have you started off-page optimization and begun building links?

Check out this [Link Building Strategy Guide](#) from SEMRush to get started.

Google sees links from external websites as referrals – these websites are essentially vouching for you. The more links you get from high authority, trusted websites, the higher your Domain Authority (your ability to rank for keywords) will be.

The higher the Domain Authority of the website the link is coming from, the more valuable the link is in the eyes of Google.

The links you obtain should also be relevant to your industry. The more links you obtain from websites that are related to your industry or topic of your website, the more likely you will rank for keywords within your industry. Similarly for low authority links, too many external links from irrelevant websites could be seen as spam and could affect your rankings negatively.

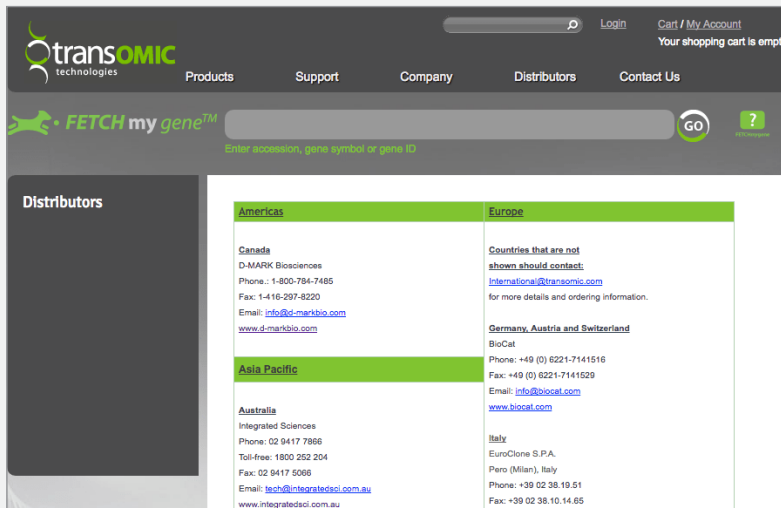
Luckily, in life sciences, the easiest place to obtain links are with other trusted high authority life science websites. Here are a few of the best places to get links:

DISTRIBUTORS AND SUPPLIERS.

Reach out to your distributors and suppliers for links on their website. This could be in exchange for a link on your site for them.

A LIFE SCIENCE EXAMPLE

Take a look at this screenshot of the Transomic Technologies distributor page below.



We consulted Transomic to reach out to each of these distributors and obtain a link. As a result, Transomic obtained 17 links from high authority, trusted, relevant websites.

High authority links can help dramatically boost a website's online visibility in search results.

Fig 11. One of many strategies for link building campaigns to increase referral traffic and domain authority.

CUSTOMERS

Reach out to your most loyal customers or clients, or the customers that you have built a relationship with. We found that the most effective way to obtain a link is in exchange for a discount on your products or services.

If any of your clients are university research labs, this is where you could hit the link jackpot. Universities have some of the highest authority websites on the web (usually with a Domain Authority of 85+). One link from a university website will be more impactful to your rankings than 50+ links from low authority web directories.

A LIFE SCIENCE EXAMPLE

We consulted Boster Bio (antibody and ELISA experts) to reach out to their top selling customers for links in exchange for a discount on their products, and advised them to focus on university research labs. As a result, they obtained several high authority links from university sites. An example is below:

The screenshot shows the website for the McNamara Lab at the University of Virginia. The navigation bar includes 'Home', 'Our Team', and 'Join Us'. The header features the University of Virginia logo. The main title is 'McNamara Lab', followed by the address: 'Robert M. Berne Cardiovascular Research Center, Division of Cardiovascular Medicine, University of Virginia Health System'. The 'Research' section discusses obesity and diabetes. The 'Selected Publications' section lists a 2014 PLoS paper. The 'Associated Sites at UVA' section lists the CVRC, Department of Cardiovascular Medicine, and CVTG. A red box highlights a link from Bosterbio offering a 20% discount on ELISA kits.

These two links are from a website with a domain authority 88 - link gold!

Fig 12. Another highly effective link building strategy from academic institutions.

LIFE SCIENCE WEB DIRECTORIES

This can be quick and easy, but it is a risky way of building links. Google frowns upon building links in this unnatural way as they see it as an attempt to manipulate their algorithms. Building links in too many web directories can result in a Google penalty. We recommend building links in 5 (maximum 10) trusted web directories related to life sciences. Just a couple of these include: <https://biopharmguy.com/>, <https://www.biospace.com/>.

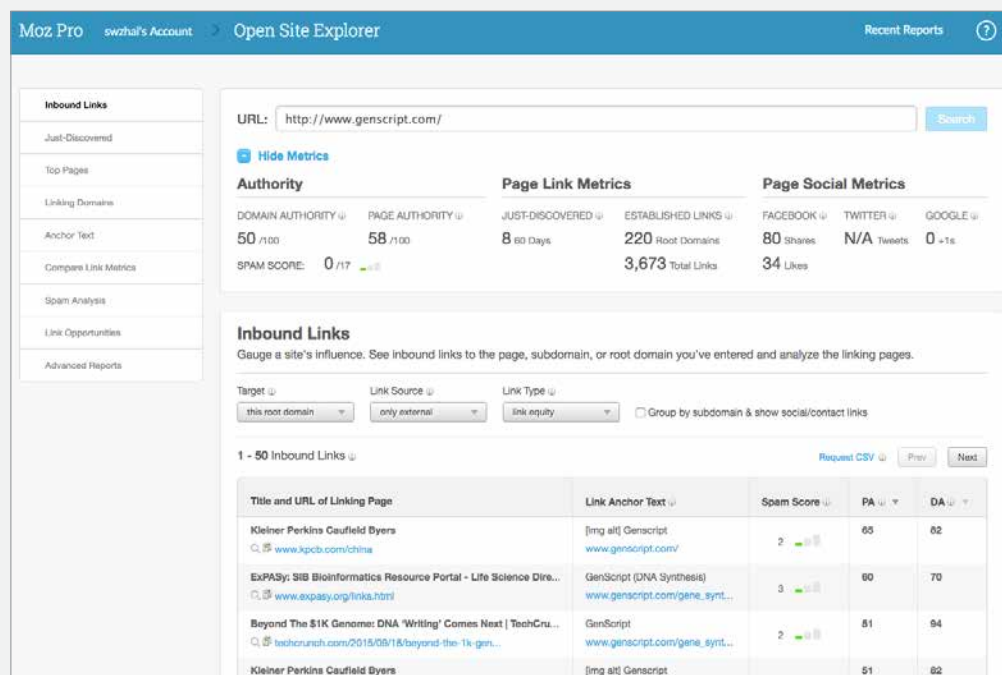
CREATE CONTENT SITES WANT TO LINK TO

Create excellent content and resources for the life science industry that is valuable enough to link to. A great way to get inspiration for content and resources is to conduct a competitor link analysis. Using Open Site Explorer (free with a Moz subscription), filter through the link profile of a competitor that is successfully ranking online.

Open Site Explorer is a fantastic resource that gives you information about every inbound link that a website has. You can essentially spy on your competitors. The software tells you where the link is coming from, which page it's linking to, the anchor text, and even the spam score and domain authority of the linking website.

Within the links displayed, we're looking for common resources and content that external websites are linking to again and again.

A LIFE SCIENCE EXAMPLE



The screenshot shows the Moz Pro Open Site Explorer interface for the URL <http://www.genscript.com/>. The interface includes a sidebar with navigation options like 'Inbound Links', 'Just-Discovered', 'Top Pages', and 'Linking Domains'. The main content area displays key metrics:

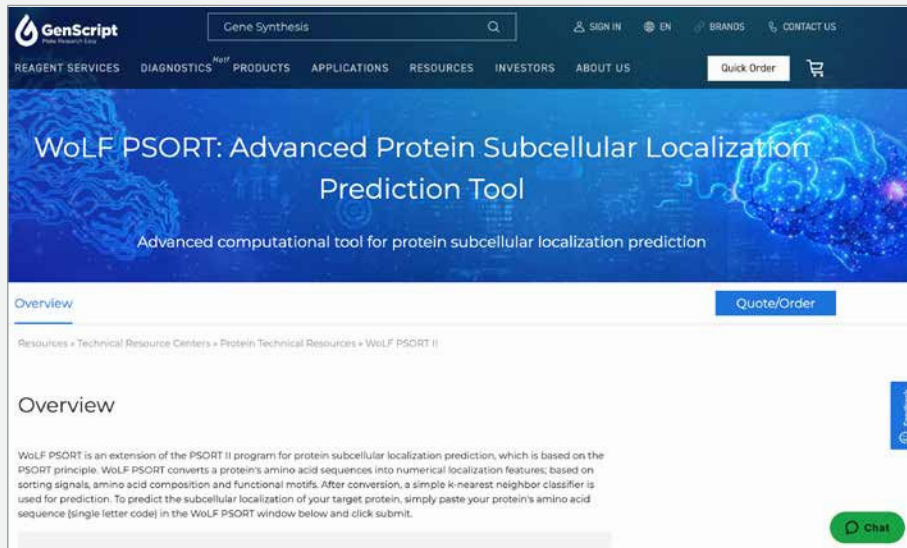
- Authority:** Domain Authority 50 /100, Page Authority 58 /100, Spam Score 0 /17.
- Page Link Metrics:** Just-Discovered 8 (60 Days), Established Links 220 (Root Domains), 3,673 Total Links.
- Page Social Metrics:** Facebook 80 Shares, Twitter N/A Tweets, Google 0 +1s, 34 Likes.

Below the metrics is a table of 'Inbound Links' with columns for 'Title and URL of Linking Page', 'Link Anchor Text', 'Spam Score', 'PA', and 'DA'. The table shows several links from sources like 'Kleiner Perkins Caufield Byers', 'Expasy: SIB Bioinformatics Resource Portal', and 'Beyond The \$1K Genome: DNA "Writing" Comes Next | TechCrunch'.

Fig 13. A full list of every single inbound link that GenScript has going to its website.

Here is a snippet from GenScript's link profile:

After analysing GenScript's highest authority inbound links, we found that 24 inbound links were referencing GenScript's [WOLF PSORT Localization Prediction Tool](#).



Domain Authority
81+: 4 links

Domain Authority
51-80: 4 links

Domain Authority
41-50: 16 links

Fig 14. Providing content and tools others find valuable is an effective way to build quality backlinks.

This simple bioinformatics tool is pulling in a large portion of GenScripts most valuable links, which is hugely boosting its own domain authority and rankings. GenScript is edging out a lot of its competitors on the search engines for protein and antibody services because of the creation of this one resource.

The reason this tool is receiving so many links is because researchers are using it for protein analysis in their research. As a result, many journal websites and university websites are referencing it.

At Supreme Optimization, we have found that creating and promoting bioinformatics tools has been a successful link building technique.

28. Have you checked your link profile health with a link audit?

As mentioned above, if link building is not done correctly, Google could view your link profile as spammy and potentially impose a Google penalty on your site.

Even before you embark on a link building campaign, it is important to check the health of your link profile using SEMrush Backlink Audit Tool or Moz's Open Site Explorer to check for spammy and low authority links that could be impacting your site negatively.

Also check any overuse of anchor text in your inbound links which could be considered a red flag of unnatural link building by Google. As a general rule, if 10+% of your inbound links have exact match anchor text (not including branded anchor text), then you should consider diluting this.

Performing a link audit is especially important if you have paid for any previous SEO services. Outdated SEO methods included submitting your site to 100s, even 1000s of spammy web directories. Google caught on to this technique and now imposes Google penalties on any websites it finds participating in these unnatural link building campaigns.

DUPLICATE CONTENT AUDIT

DUPLICATE CONTENT CAN NEGATIVELY IMPACT YOUR RANKINGS

A common SEO technique used by spammers up until 2012 was to create a page of content and duplicate this content across several URLs. The spammers would hope to dominate the search results by ranking on page 1 several times with different URLs, and therefore stealing all of the traffic. Google has cracked down on this technique and decreased the rankings of sites that participate in this practice, or even imposed penalties on these sites. In fact, Google now limits the amount of times one website can rank in the search results for a single keyword.

WEBSITE SECTIONS AND SUBDOMAINS

Duplicate content problems persist quite commonly in the field of life sciences. Oftentimes companies have multiple divisions, languages and microsites on separate subdomains. These subdomains are often created to clarify websites. However, from an SEO perspective, subdomains are treated by Google as separate websites.

A LIFE SCIENCE EXAMPLE

In Wuxi AppTec's scenario, they have multiple divisions that branch off their corporate website. One of their subdivisions is the small molecule CDMO division and is situated on the subdomain: https://chemistry.wuxiapptec.com/small_molecule while their main website is situated at <https://www.wuxiapptec.com/>. The main domain won't receive any SEO benefit from the subdomain. Instead, the main domain and small molecule subdomain begin to compete with each other for the same keyword phrases and in turn make it more difficult for either website to rank.

If you are placing subdivisions on subdomains, you may be cannibalizing your own rankings.

DUPLICATE PRODUCTS

It's important to thoroughly check whether or not the same content resides on completely different URLs. This is often hard to avoid on ecommerce biotech websites that list 100s to 1000s products. These products can either be extremely similar, or the same product could be replicated across different categories.

A LIFE SCIENCE EXAMPLE

Take a look at these two example URLs from Vector Lab's website:

<https://vectorlabs.com/products/labeling-reagents/biotin-quantitation-kit-quant-tag-biotin-kit>

<https://vectorlabs.com/products/biotin-and-avidin-streptavidin-reagents/biotin-quantitation-kit-quant-tag-biotin-kit>

Fig 15. Two versions of the same content may lead to duplicate content penalties.

These two URLs show the exact same product under two separate categories.

This is duplicate content. These two pages are competing with each other to rank in the search results. As a result, Google could end up not ranking either of them.

SOLUTIONS

Utilizing a tool like Moz Pro's Crawl Test or SEMrush Site Audit Tool will provide you with reports on duplicate content and page titles.

If you've recently launched a new website or a page has been updated, make sure to utilize 301 redirects, canonical tags or use Google Search Console to fix any duplicate content that might be indexing and penalizing your site.

To assist with this process, utilize <https://copyscape.com> to check for duplicates of your content not only on just your website, but other websites as well.

Other ways to search for duplicate content would be to:

- Take a content snippet, put it in quotes and search for it.
- Does the content show up elsewhere on the domain?
- Has it been scraped? If the content has been scraped, you should file a content removal request with Google.

THE DUPLICATE CONTENT AUDIT

29. Check there is one URL for each piece of content.

30. Check for subdomain duplicate content.

Does the same content exist on different subdomains? This includes different languages, staging/development sites, DNS servers, mirror sites and more.

31. Check for a secure version of the site.

Does the content exist on a secure version of the site? If it is, make sure that is the preferred version of the website and other versions are redirected to it.

Pro tip: Google “[strongly recommends using HTTPS](#) for your site to protect your users’ security and privacy.” So if you aren’t using HTTPS encryption, you should.

32. Check other sites owned by the company.

Is the content replicated on other domains owned by the company?

33. Check for “print” pages.

If there are “printer friendly” versions of pages, they may be causing duplicate content.

34. Check URL Parameters.

Are product categories filtered using url parameters? For example:

<https://example.com/products/enzyme-substrates>

<https://example.com/products/enzyme-substrates?applications=ihc&enzyme=ap>

The second URL above is a duplicate of the first URL listing enzyme substrates, except the second URL is filtered for enzyme substrates with a IHC application (applications=ihc) and alkaline phosphatase detection enzyme (enzyme=ap).

The two URLs are duplicates of one another as they display most of the same content. Use canonical tags to specify to Google which of these URLs to ignore.

35. Check that your international websites don't have duplicate content.

If you have pages that serve multiple languages, be sure to properly identify those pages using hreflang tags so they are not viewed as duplicate content. Doing so will help Google Search point users to the most appropriate version of your page by language or region. More on international website considerations can be found later in the International Chapter.



“Sheldon here. Do you want to hear how our PhD team of content writers and marketers can improve SEO for your company?”

Let's set-up a time to chat. [Fill out this form](#) on our website and indicate 'SEO Checklist' to get the conversation started.”

ACCESSIBILITY & INDEXATION

Accessibility and indexation are extremely important factors especially for life science companies with large catalogs of products. Oftentimes because there are so many unique genes and products referencing product families, web developers opt to place the entire product catalogue onto a database. Therefore, when a customer searches through the website, they can find all of the database products easily in one place.

Executives are happy and web developers are able to charge less for this type of product catalog. However, the major area overlooked is when it comes to search engines. Search engines may not be able to index your product database search results without specific parent category landing pages!

Parent category landing pages help search engines understand your product database and help your site to rank for category terms that are not specific to one product e.g ELISA Kits or Biosimilar Antibodies.

Additionally, if you plan to run paid traffic to any of these pages, you won't be able to run paid traffic to a dynamically generated search listing page. Instead, you will need a parent category landing page that lists the unique SKUs of your product. For example, the parent category page would be 'ELISA Kits' and child products could reference different SKUs, sizes, targets and other formats of your product.

36. Check the robots.txt.

Has the entire site, or any important content been blocked? Is link equity being orphaned due to pages being blocked via the robots.txt? Follow [Google's guidelines](#) on how to write a robot.txt file to make sure google can index your site.

37. Turn off JavaScript, cookies, and CSS.

- Install the Web Developer Toolbar for your browser.
- After turning off JavaScript, cookies and CSS, is the content still there?
- Do the navigation links work?
- Ensure that bots can still crawl your site without having to render javascript.

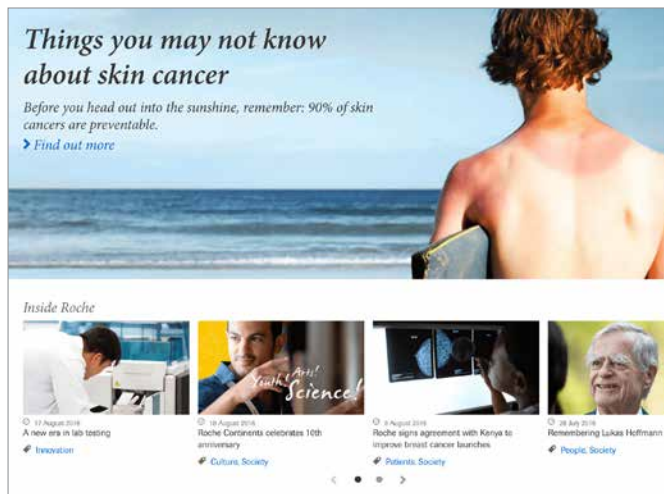


Fig 16. Roche's full website with JS and CSS enabled.

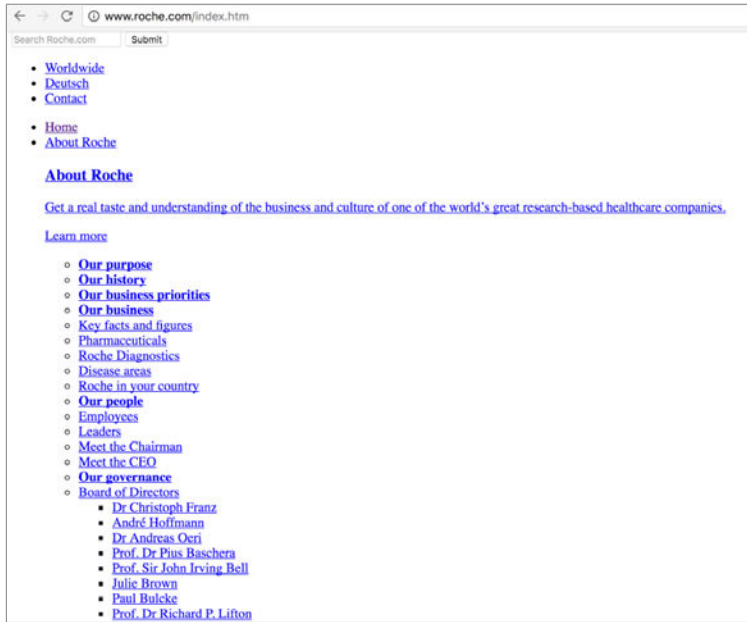


Fig 17. Roche's website with JS and CSS disabled. The links and content still exist normally and are crawl-able by search engines.

38. Now change your user agent to Googlebot.

- Use the User Agent Add-on
- Are they cloaking? Cloaking is a search engine optimization (SEO) technique in which the content presented to the search engine spider is different from that presented to the user's browser. This is done by delivering content based on the IP addresses or the User-Agent HTTP header of the user requesting the page
- Does it look the same as before?

39. Check your Moz crawl report for 4xx errors or 5xx errors and resolve them.

40. Are XML sitemaps listed in the robots.txt file?

41. Are XML sitemaps submitted to Google Search Console/Bing Webmaster Tools?

42. Are pages accidentally being tagged with the meta robots noindex command?

This will prevent search engines from accessing noindex pages.

43. Are there pages that should have the noindex command applied?

Landing pages that you've created specifically for certain campaigns, or duplicates should be no-indexed by search engines.

44. Do conversion pages have the noindex command applied?

This is important to prevent direct organic visits from showing up as conversions in analytics. If your conversion pages are showing up on Google organically, it will skew your conversion data metrics.

SITE ARCHITECTURE AND INTERNAL LINKING

One of the most overlooked areas for an effective SEO strategy is the site's architecture. This is one of the most crucial aspects of your site's SEO performance, however most don't understand exactly what type of site structure influences SEO.

At the core of site structure is a great user experience. If you remove all of the design elements, colors, branding, fonts, graphics, and white space, all you are left with is structure. Have you noticed that certain websites have an intuitive feel to them? That's because these companies have continually optimized the user experience that is logically and cognitively satisfying to users according to their behavior flow.

In turn, because the site is more satisfying to users, search engines will be able to index and rank it better as well. Google's algorithm uses information from searchers to rank your website. If your site has poor CTRs, high bounce rates, low engagement, it will not perform well in the SERPs. By contrast, when a user finds a site that they like, spends a lot of time on it, and finds what they are looking for, Google will rank this one higher. For more resources on website UX/UI, please check out Supreme Optimization's post on '[5 Challenges Life Science Companies Face During Web Development and Solutions](#)'

45. When you Google your brand name, does your website have sitelinks?

A good site structure will provide your site with sitelinks.

Sitelinks provide a huge SEO advantage. Not only do they increase the visual footprint of your brand in the search results, they also point users to the most relevant information, increases your brand's reputation, improves user trust, increases clickthrough rate, and shortens the conversion funnel.

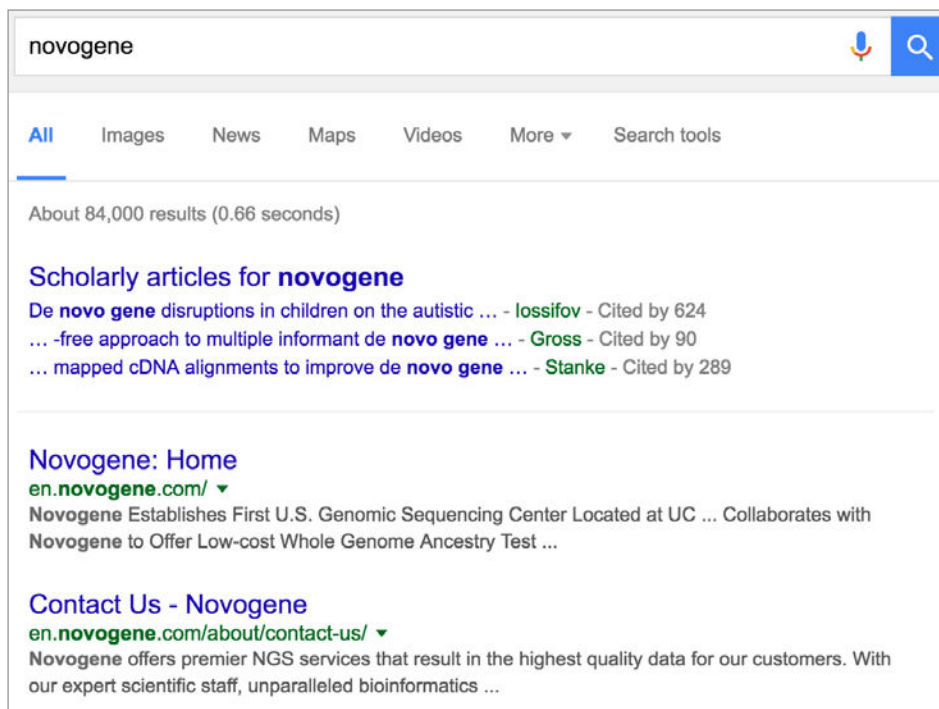


Fig 18. Novogene's site architecture was not optimized. Google is unable to effectively determine sitelinks which result is lower CTR.

However, you cannot simply tell Google what to place under your site links. Instead, Google algorithmically awards your website with better sitelinks depending on the site structure. With poor site structure, it is likely your site will not receive site links, or they will be incorrect. For Novogene, even though their website has been around for a long time, when searched, no sitelinks are returned.

❑ **46. If you haven't developed your website yet, plan out the hierarchy before developing the site.**

Some web development agencies will help guide you through this process, otherwise will ask that you provide a wireframe and structure for them. [Lucidchart](#) and many other wireframing websites can help you establish a visual architecture prior to development. The general hierarchy should look like the flow to the right.

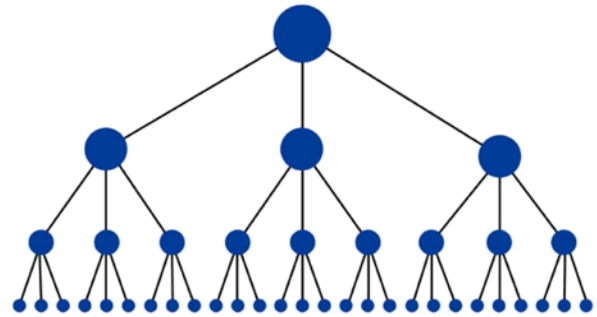


Fig 19. A great site architecture diagram courtesy of Moz.com. Logical for users and search engines.

❑ **47. Make your site hierarchy logical.**

Do not reinvent the wheel, or overthink this process. Simplicity is key. If you sell antibodies, look at the most successful antibody company as an example. It's likely they've already done the hard work of building a highly intuitive website for customers. Each main category should be unique and distinct. Each subcategory should relate to the main category. For products, they should have a parent family page, and the child products listed within that family.

❑ **48. Avoid thin categories with sparse content.**

Unless you are Amazon.com, you should keep it simple and combine categories when possible to increase ranking potential. Avoid "thin" categories with sparse content wherever possible.

❑ **49. Try to balance the amount of subcategories within each category.**

❑ **50. Code your site navigation in HTML or CSS.**

Don't code in JavaScript, Flash, or Ajax because this limits the crawlers' ability to interpret structure.

❑ **51. Keep the depth of the navigation structure shallow.**

Since your navigation structure follows your architecture, you should make sure the pages, especially important ones, don't take more than three clicks to reach every page. With each click deeper down into your website, the higher number of dropoffs there will be (eg. lost customers).

❑ **52. Develop a comprehensive internal linking structure.**

- This will help user experience as well as search engines understand the site hierarchy. [Moz's article on internal links](#) lists three reasons why they are important:
- They allow users to navigate a website.
- They help establish information hierarchy for the given website.
- They help spread link juice (ranking power) around websites.

Each of these are directly tied to creating a tight-knit and well-integrated site structure.

❑ **53. Make sure your footer links are duplicates of your header links.**

They should not be a block of footer links, but instead proper, simple navigation.

TECHNICAL ISSUES

❑ **54. Crawl your entire website for site errors using Moz to identify technical issues.**

Membership to the best SEO crawl software, Moz, is \$99/mo, however you can [reach out to us](#) to get access to a site crawl for free. Alternatively, [ScreamingFrog SEO Tool](#) provides a semi-free option for the first 500 pages. These tools will help you check your site for technical issues that may result in penalties by search engines.

❑ **55. 301 redirects should be used for all permanent redirects.**

❑ **56. If the root is being directed to a landing page, are they using a 301 instead of a 302?**

You can use 'Live HTTP Headers' Firefox plugin to check 301s.

❑ **57. Avoid “Bad” redirects.**

These include 302s, 307s, meta refresh, and JavaScript redirects as they pass little to no link equity.

❑ **58. Redirects point directly to the final URL and do not route through redirect chains.**

The reason for this is that redirect chains slow down the load time and diminish the amount of link equity associated with the final URL. Additionally, Google has said that they will stop following a redirect chain after several redirects.

❑ **59. Check Google Search Console for 404 / 500 errors, manual actions, duplicate content, missing titles and other technical errors.**

Make sure to stay up to date to the notices that Google sends to the linked account email.

❑ **60. Use of iFrames.**

Is content being pulled in via iFrames? Don't use iFrames for pages that you really want to rank well for such as your main pages. Content embedded through iFrames won't count which makes it difficult for you to rank. Sometimes life science companies put technical details, specifications and other product information in iFrames which makes it very difficult to index.

❑ **61. Avoid any use of Flash.**

Bottom line is that modern websites should not utilize Flash because it is very difficult for search engines to index.

❑ **62. Ensure rel canonical link tags are properly implemented across the site.**

Make sure your rel canonical link tag points to the correct page, and every page doesn't point to the homepage.

❑ 63. Use absolute URLs instead of relative URLs.

At any given time, your website can have several different configurations that might be causing duplicate content issues. You could have just a standard <http://www.example.com>.

However, the main sources that we see of domain level duplicate content are when the non-www.example.com does not redirect to the [www](http://www.example.com) or vice-versa, and when the HTTPS versions of your URLs are not forced to resolve to HTTP versions or, again, vice-versa. What this can mean is if all of these scenarios are true, if all four of these URLs resolve without being forced to resolve to a canonical version, you can, in essence, have four versions of your website out on the Internet. (See Fig. 21 on the next page to see what this might look like). This obviously presents duplicate website issues. Read this fantastic [Moz article for more in-depth resolutions](#).

SITESPEED

If you spend some time exploring our website, you'll notice pages load very quickly. This is by design. Sitespeed is critical for both user experience and search engine rankings. If it's taking over a few seconds to load your website completely, then your search engine ranking potential may be impacted. In fact, it has been proven in [this fantastic article just how important sitespeed is to search engines](#). The back-end performance of a website directly impacts search engine ranking. The back-end includes the web servers, their network connections, the use of CDNs, and the database servers. Website owners should explore ways to improve their Time to First Byte (TTFB). This includes using CDNs, optimizing your application code, optimizing database queries, and ensuring you have fast and responsive web servers.

Furthermore, sitespeed isn't only about search engines and rankings. Instead, a slow website dramatically affects user experience, conversion rates, and ultimately revenue. Cloudflare provides this quick yet convincing study on ["How Website Performance Affects Conversion Rates."](#) For example, did you know that 47% of customers expect a webpage to load in 2 seconds or less? Also testing by AI healthcare software company mPulse Mobile found that:

- Pages that load in 2.4 seconds have a 1.9% conversion rate
- But at 3.3 seconds, conversion rate drops to just 1.5%
- At 4.2 seconds, conversion rate is less than 1%
- And at 5.7+ seconds, conversion rate is a mere 0.6%!

❑ 64. Have you checked your site's speed with Google PageSpeed Insights?

Follow the checklist that Google provides in order to speed up your website. (See Fig. 22 below)

Your website should be in the range of 85/100 or above. A few of these optimizations are listed below including:

❑ 65. Make sure compression is enabled and perform a [Gzip Test](#).

❑ 66. Enable caching which will dramatically speed up your website upon second visit.

❑ **67. Optimize your images for the web.**

Learn best practices by reading [Google's guide](#) to optimizing your images.

❑ **68. Minify your CSS/JS/HTML.**

❑ **69. Use a good, fast host.**

Generally, Amazon EC2 instances are the preferred choice rather than insecure, shared servers from a hosting company such as GoDaddy or Bluehost. However, please note that setting up an Amazon instance requires a skilled developer.

❑ **70. Consider using a CDN for your images or [CloudFlare](#) (\$0-\$200+/month).**

❑ **71. Optimize your images for the web instead of using large file size images.**

❑ **72. Run a test on [GTmetrix.com](#) and resolve all speed issues as well.**

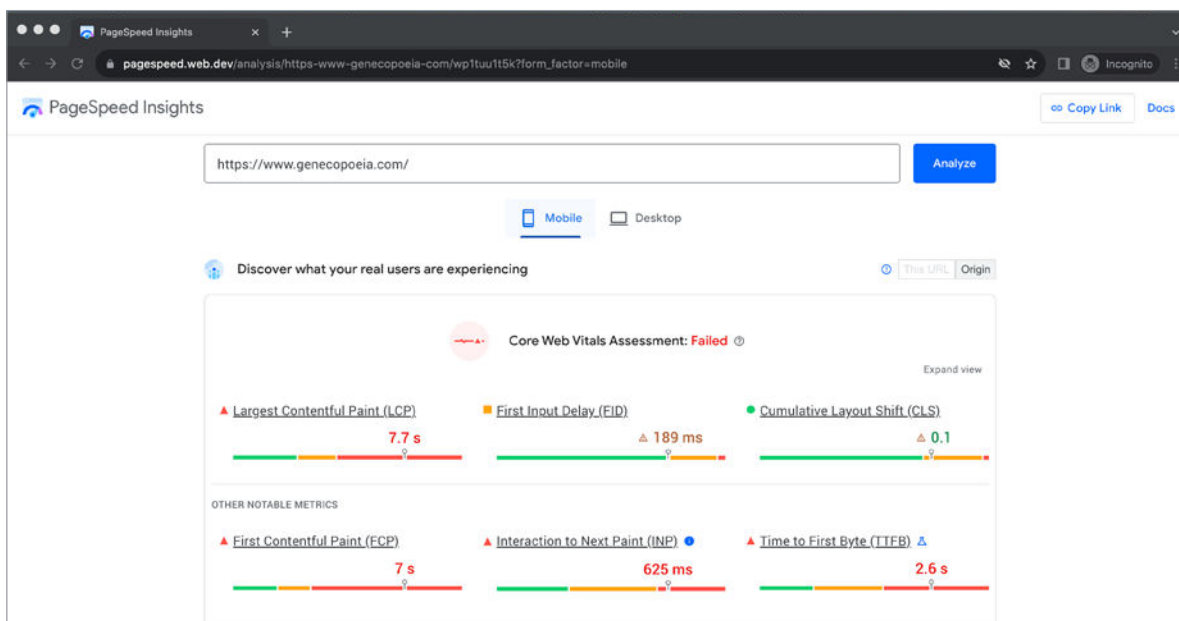


Fig 20. Google's Pagespeed Insights is a great, free diagnostic tool for identifying optimization needs.

MOBILE

Google officially announced in 2015 that “more Google searches take place on mobile devices than on computers in 10 countries including the US and Japan.” Research.com notes that mobile use now represents over half of digital media time, while the desktop is becoming a “secondary touch point” for an increasing number of digital users. Therefore, it is no wonder why Google Search has since continued to expand its use of mobile-friendliness as a ranking signal. As Google noted then, this change has impacted mobile searches in all languages worldwide and has had a significant impact in Google Search results.

In the life science industry, desktop is still the preferred device to browse life science websites, however, mobile usage is on the rise with some sites seeing as much as 40% of their traffic from mobile devices. It is important to remember that Google uses mobile-first indexing which means Google determines your site’s ranking according to the mobile experience and content.

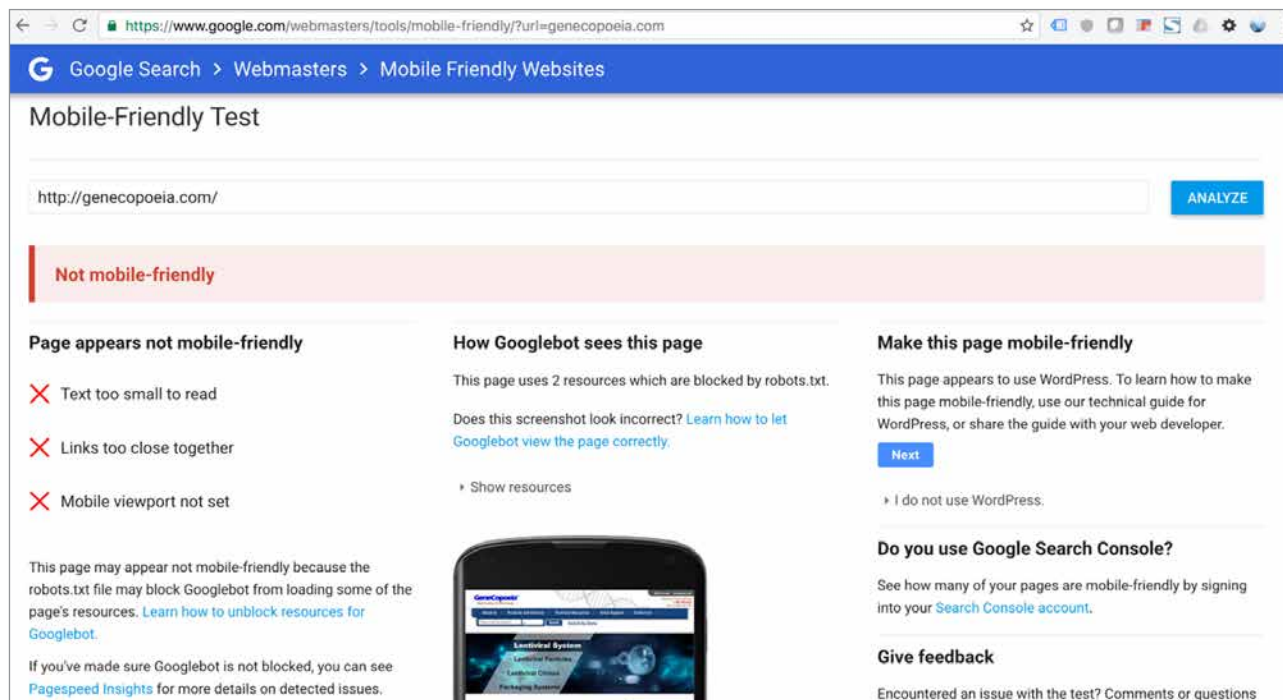
- Run a mobile usability test on Google at <https://search.google.com/test/mobile-friendly>

73. Follow Google’s suggestions to ensure mobile friendliness.

74. Ensure that your site is responsive and displays content based on screen size.

- Make sure that Google can access and render your content on mobile devices and is the same across both mobile and desktop platforms.

75. Check that your website is responsive with multiple browsers and screen sizes via BrowserStack (\$29-\$150/month).



The screenshot shows the Google Search Webmasters Mobile-Friendly Test interface. The URL entered is <http://genecopoeia.com/>. The result is "Not mobile-friendly".

Page appears not mobile-friendly

- ✗ Text too small to read
- ✗ Links too close together
- ✗ Mobile viewport not set

This page may appear not mobile-friendly because the robots.txt file may block Googlebot from loading some of the page's resources. [Learn how to unblock resources for Googlebot.](#)

If you've made sure Googlebot is not blocked, you can see [Pagespeed Insights](#) for more details on detected issues.

How Googlebot sees this page

This page uses 2 resources which are blocked by robots.txt.

Does this screenshot look incorrect? [Learn how to let Googlebot view the page correctly.](#)

Show resources

Make this page mobile-friendly

This page appears to use WordPress. To learn how to make this page mobile-friendly, use our technical guide for WordPress, or share the guide with your web developer.

Next

I do not use WordPress.

Do you use Google Search Console?

See how many of your pages are mobile-friendly by signing into your [Search Console account](#).

Give feedback

Encountered an issue with the test? [Comments or questions](#)

Fig 21. An example of a poorly optimized website via Google’s mobile usability test.

INTERNATIONAL

- 76. Place international versions on a subfolder rather than a subdomain.
For more information on the reasons for this, please visit our blog article on: [“How to Use Subdomains vs Subfolders”](#).

- 77. Enable country based targeting in Google Search Console.
If the site is targeted to one specific country, is this specified in Google Search Console?
If the site has international sections, are they targeted in Google Search Console?

- 78. Optimize your website for China.
In life sciences, one of the fastest growing sectors is overseas in Asia. However, China has unique requirements in order to display content through their firewall. In order to make your life sciences website visible and accessible, please follow our guide: [“3 Tips for American Life Science Companies Expanding to China”](#)

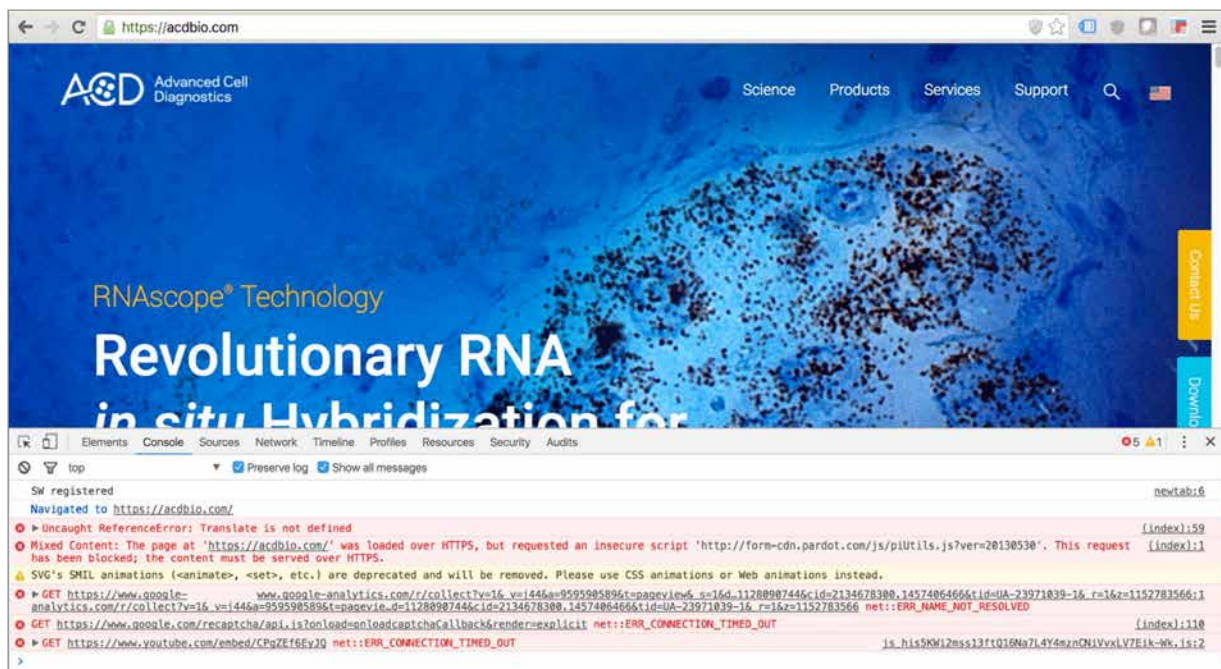


Fig 22. Utilize Google’s developer console to check if your website is China-compatible.

BONUS: HOW AI IS CHANGING SEO

The field of Artificial Intelligence (AI) is growing exponentially and is already revolutionizing the field of SEO in profound ways. Here are some of the ways that life science companies are leveraging AI to optimize their websites:

Accelerated Content Creation

AI-powered tools like GPT-4 have made it easier to quickly generate high-quality, relevant, and engaging content. Marketers can now automate content creation for blogs, product descriptions, social media and more, saving precious time. In our experience, any AI-generated content still needs to be manually checked, edited and supplemented by an expert in the life science field to ensure the content is not only appropriate for the target audience, but also accurate.

Keyword Research

SEO professionals are using AI-driven algorithms to analyze vast amounts of keyword data to help supplement their optimization strategies. Tools like GPT-4 can be used to group keywords, analyze keyword intent and even provide topic suggestions to best target a keyword.

Competition Analysis

New AI capabilities and integrations with existing software tools is allowing marketers and SEOs to quickly analyze competitor websites, messaging and overall content strategies. This is helping marketing professionals make data-driven decisions on how to improve and optimize their own content in order to increase reader satisfaction and page rankings.

Technical SEO

AI-driven tools can greatly speed up the process of crawling websites in order to identify technical issues like broken links, duplicate content and page load speed issues. This also quickens the process of addressing technical issues that may be affecting the indexing of your site.

User Behavior Analysis

AI-driven tools are being used to analyze user behavior and even summarize insights from usability testing interviews to help SEO professionals identify and address issues affecting user satisfaction faster. This not only improves the experience on the site, but also helps websites rank higher by improving engagement metrics.

SUMMARY

Congratulations! You've made it through the entire SEO Checklist for Life Science Companies!

Look, we know this stuff is not easy. If it were, everyone would be able to do it.

But, by downloading, reading, and taking action on this guide, you've just taken an incredible first step towards decoding the complex world of website optimization and improving your search results in major search engines. Not only will the implementation of this guide improve your organic traffic, but also the effectiveness of any paid search engine marketing campaigns.

We also want to extend an invitation from our team to yours for a 1 Hour Checklist Walkthrough with a dedicated PhD scientific strategist.

On this call, you will be personally guided through the “lowest hanging fruit” on this checklist for you to take action on right now. And don't worry; your call is not a sales pitch in disguise. We know it can be overwhelming to know exactly where to start and we're here to help you do just that. After this call, you will come away with your first 3-5 step action items to start off with.

To reserve your space (these do fill up fast and we can only do so many per month) just follow the link and provide a little information about yourself here:

<https://www.supremeopti.com/contact/>

Please indicate “SEO Checklist” on the form so we know to connect you with an PhD scientific strategist specifically.

We just ask that you give us a week or two for your strategist to view your website, run the preliminary diagnostics, and speed test required to provide you with meaningful action items.

After you fill out the contact form above, please continue reading as we have provided a list of some great tools and resources that we use as a team at Supreme Optimization to get our clients great results.

TOOLS

Moz.com - A source for fantastic SEO software, tools, and resources.

Keywordtool.io - A fantastic keyword tool for long string keywords.

Google Keyword Planner - Google's own keyword planning software to track search volume and related keywords.

Google Mobile-Friendly Test - Google's own mobile usability test and suggestions.

Google Pagespeed Insights - Google's own sitespeed test.

Google Analytics - Google's own analytical software for all your website data insights.

Google Search Console - Google's own webmaster console for site health and updates.

Bing Webmaster Tools - Bing's own webmaster console for site health and updates.

Copyscape.com - A tool to identify duplicate content across the internet of your website.

SimiliarWeb.com - Compare your website to your competitors in terms of traffic, and more.

Lucidcharts.com - A fantastic tool to quickly establish your websites UX and architecture.

CloudFlare - A fantastic CDN option for faster sitespeed.

BrowserStack.com - A tool for responsive testing and mobile usability.

Amazon Web Services - In our opinion, the fastest and most secure servers for your website hosting.

For more SEO tools, check out **Moz's list of the best free SEO tools**.

ADDITIONAL READINGS

Life Science Digital Marketing Articles

Visit [Supreme Optimization's blog](#) for a wealth of free resources tailored to life science digital marketing strategy.

5 Challenges Life Science Companies Face During Web Development

Developing a website is a challenging and time-consuming process. Life science websites present additional complexities depending on the purpose of the website. Whether the purpose of your site is to clearly illustrate a complex concept to potential investors looking at the website, or to sell time-sensitive products through an eCommerce platform, it's important to understand how life science web development differs from other fields. That's why it's important to work with a company familiar with specificities of the industry.

Read [this article](#) to prevent problems prior to running in to them.

6 Web Design Trends for the Life Sciences Industry

There are certain challenges when developing and designing a website for the life sciences field. The bottom line for a website is that it must effectively and intelligently communicate the company's message to its target audience.

However, there are often challenges and communication gaps between designers in understanding the unique needs of a life science company.

Over the past decade, our team has spent thousands of hours browsing, consulting and developing some of the top websites in life sciences. Most websites have areas that they excel in, and areas that could be improved.

In this article, we've outlined a few of the best aspects of a handful of our favorite sites in the field of life sciences.

The Roll Out Strategy, A Marketing Funnel for Life Science Companies

This strategy is ideal for life science companies that are targeting lab researchers and scientists as their customers.

Our roll out strategy is designed to explode your organic traffic and email list by leveraging content marketing, LinkedIn and remarketing techniques. The above marketing funnel looks complicated, but in fact, it's dead simple.

It all starts with the content. Providing excellent resources and tools to your potential scientist customers for free will substantially increase your brand awareness and trust, and establish your company as an industry expert. Just think of ThermoFisher, Genscript or Abcam. The Resources and Support sections of their websites are jam packed full of bioinformatics tools, guides, protocols, posters, video tutorials and more. This is a huge part of their online success and domination of the search engines.



To see the proof, read this article for in depth case studies of companies like [Thermofisher.com](https://www.thermofisher.com)

3 Tips for Life Science Companies Expanding in China

The most simple way for companies and customers in China to learn more about your business is through your website. Unfortunately, Google is blocked in China, which presents a multitude of issues in search visibility and website load speed. Your sales team or customers in China may often complain that the website is slow, non-responsive, or broken. This article will explain how to get past China's firewall.

How Much Does a New Life Science Website Cost?

There's a sequence of questions we get asked the most when we are scoping out a new life sciences website. It goes something like this:

Client: "So how much does a website generally cost?"

Us: "Generally speaking, in the \$100,000 range."

Client: "*For a website?*"

The truth of the matter is that, yes, \$100,000 seems like a lot of money. The other truth is that a high-quality website is an absolute steal for the amount of value and return on investment it brings to your company. A well-designed and optimized website can help you attract more customers, generate more leads, and increase sales.

Conversely, in the long run, a poorly designed and under-optimized website can cost you much more in lost revenue and opportunities.

Read this article to see why a new, expert-driven and professionally designed website is a fantastic investment for your business.

AN SEO CASE STUDY: AUDUBON BIOSCIENCE

Delivering a website that builds credibility and increases leads

See how we helped Audubon transform their website into a confident lead-generation machine.



We've had more leads 2 months post-launch than we've had in the past 4 years.

"We are happy we went with Supreme. Usually, it takes 2-3 months to see a real kick in organic traffic, but we are already seeing a 200% spike and the new website immediately generated 8 to 10 relevant leads."

ROSTYSLAV

Audubon, CEO and Founder

THE CHALLENGE

With their current website, vendors viewed Audubon as a startup. In reality, they were an established firm with more than 100 clinics worldwide.

Functionality limitations prevented them from optimizing their small site for SEO. This resulted in lower traffic.

Audubon needed a website that could both generate leads and position them as an established, reliable player in the biospecimen market.

THE STRATEGY

The biospecimen market is extremely competitive. Audubon stands out by providing a boutique service with access to samples in over 100+ clinics worldwide.

We wanted to attract both biospecimen customers and doctors willing to partner with Audubon.

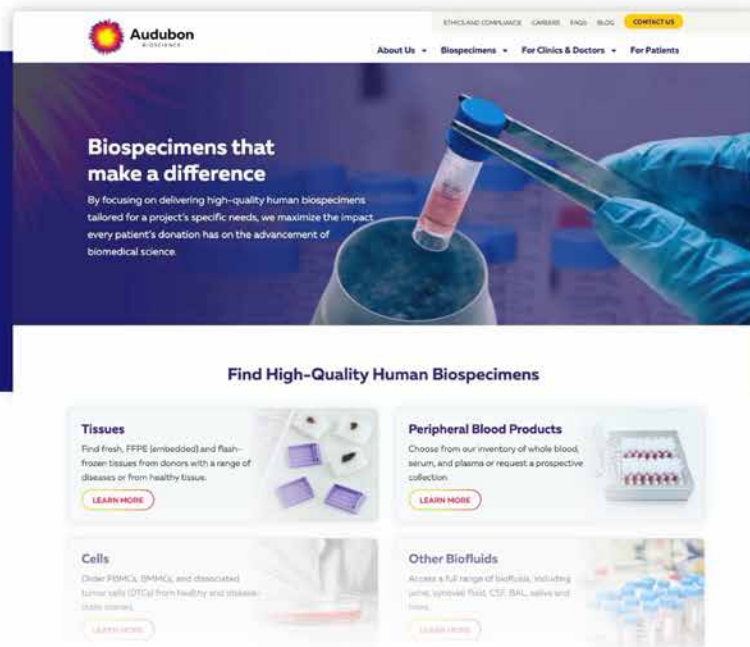
To do this, we built an SEO optimized website, used expert copywriting to position the company as an industry leader, and implemented a modern design that demonstrates reliability and instills confidence.

THE RESULTS

Following the launch of the website, Audubon generated more leads within 2 months than they had in the past 4 years.

Within three months, their total website sessions increased by 270%. In six months, it increased by 330%.

Organic traffic increased by 205% in the first six months post-launch and continues to grow. The website improvements also led to a 7x increase in total keywords and 16x increase in keywords ranking in the top 10 positions.



HOMEPAGE AND NAVIGATION

Audubon initially came to us for SEO. We found their small 8 page website wasn't indexed by Google. This meant we needed to build a new website so they could enjoy the full benefits of our SEO strategy.

Our team built an intuitive information hierarchy, improved the design and navigation throughout the website, and created additional pages to target long-tail keywords. We also added sections for different audiences (researchers, doctors and patients), and to highlight Audubon’s commitment to ethics and compliance standards.

The Homepage is strategically designed to communicate the unique benefits and scope of the company’s biospecimens and services. Near the top of the page, we’ve included links to each biospecimen category. This allows users to quickly navigate to relevant product pages.

To communicate the reliability of the company to viewers, we added two sections: an easy-to-scan passage on the Audubon Guarantee, and a directory of the company’s global network of clinic locations.

Because biospecimens support a wide range of disease indications, we introduced a quick link to the “disease area” resource section relevant for both physicians and patients.

We also strategically developed design features on the homepage. Buttons on the homepage stand out from the primary brand colors to draw attention and match the company logo. The icons and faded background images also mimic the logo shape, delivering a cohesive feel. These design features are used throughout the website.

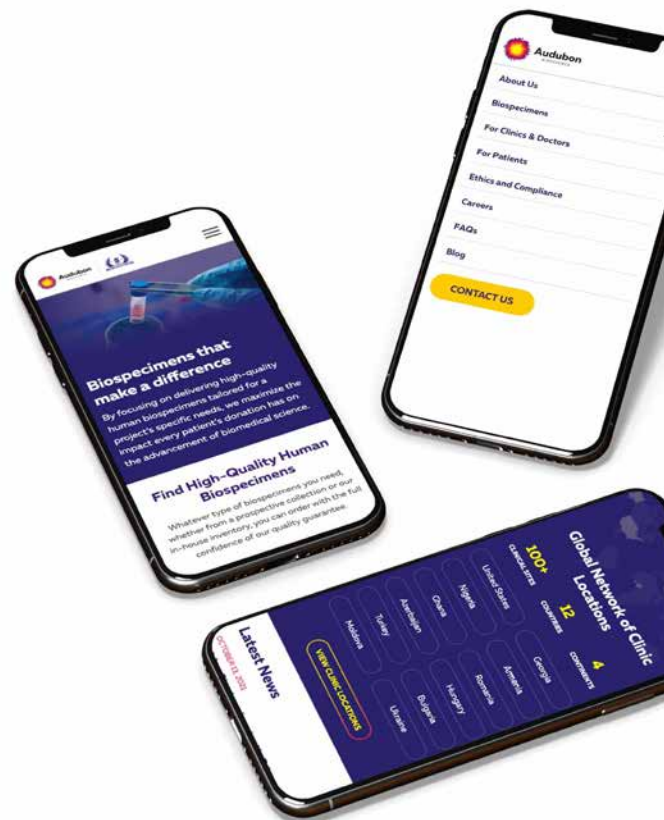
Together, these efforts increased organic traffic, improved the user experience, and communicated Audubon’s full scope of unique offerings.

MOBILE

Due to Google’s mobile-first indexing, mobile plays an important role in the success of the site. That’s why we designed the new website to be fully responsive and mobile friendly.

Our pre-launch and post-launch testing includes a range of popular devices, browsers, and screen sizes to ensure a seamless website experience for all users.

With the homepage mobile view and navigation we mirrored the desktop strategy. This provides intuitive navigation and sufficient information to guide users deeper into the site.



BIOSPECIMEN PRODUCT PAGES

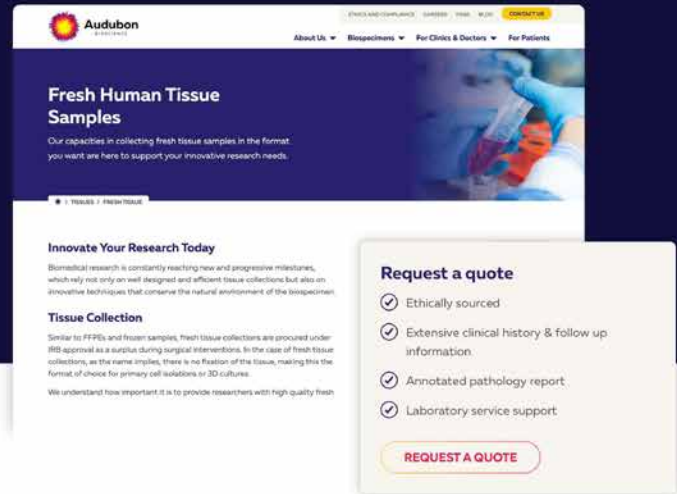
The objectives of the product page designs were to:

1. Make it easy to find the type of biospecimen the viewer was searching for.
2. Clearly communicate the laboratory analytical services.
3. Highlight the sourcing and sample matching capabilities.

When content is lacking, customers cannot find answers to critical questions. They're left to wonder if the company really has the sample specifications that meet their needs. Or if they can deliver compliant samples in the right timescale.

Each product category page links to specific sample types, lists the analytical services used throughout the website, and directs visitors to an informational page on matched biospecimen sets.

Moving deeper into the website, viewers land on product-specific pages that communicate the various formats, services, and shipping options. On each product page, we've placed a sticky "request a quote" section that scrolls with the page. This makes it easy for users to continue to the next step of the buying process.



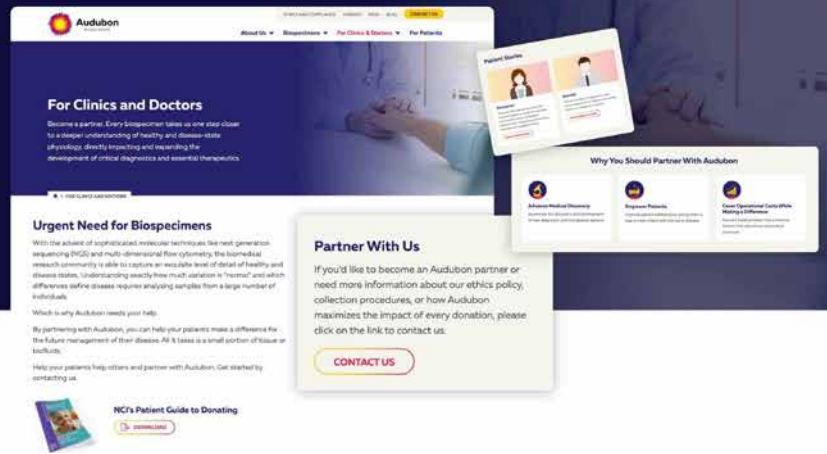
FOR CLINICS AND DOCTORS

The original website was limited in content. It largely discussed Audubon's offering without demonstrating a reason to buy or partner with them. Our goal was to develop a compelling story that highlights the unique benefits of choosing Audubon, which spoke to doctors, researchers, and patients.

By using strong positioning, an SEO-focused approach, and a conversational tone, we created original content that engages users and makes them feel comfortable.

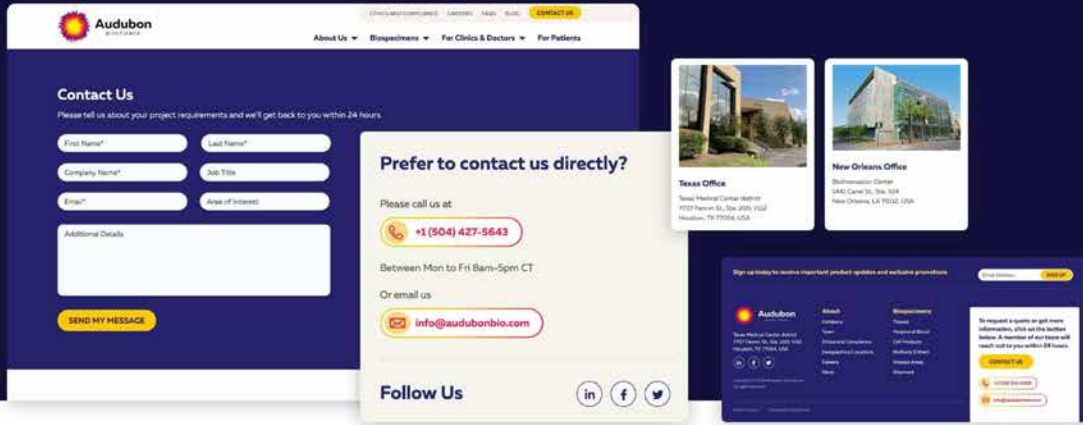
We took this a step further by increasing high-quality imagery, adding visual cues to direct users to the most useful next step, and including images of the team to humanize the company.

Having a polished website with the right pages and content enhances a company's credibility. This is exactly what we delivered.



GLOBAL NETWORK OF CLINIC LOCATIONS

Audubon stands out by providing a boutique service with access to samples and clinical data in over 100+ clinics worldwide. We designed the geographical locations page to showcase Audubon's global network of hospitals, clinics, and laboratories.



CONTACT US

The contact us page is the primary lead generation form on the website. The page is accessible on both the top right of the navigation bar and on all product pages.

The contact form and secondary contact information are both visible above the fold to help users get in touch quickly. To prevent unnecessary friction, we've kept the number of form fields to a minimum and required fields are explicitly marked.

To further emphasize Audubon's global reach, all office locations are included on the contact us page.

Now Audubon's team can make changes to their WordPress website with the confidence that it is properly indexed and boosted for visibility and traffic.

GET A FREE CONSULTATION

Did you enjoy this content and receive a lot of value from it? Have you considered running paid ads to help supplement your SEO efforts?

Be sure to check out our other free resource guides if you have yet to do so! Simply click on the cover images on the next page to grab your complimentary digital copies.

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