AN INSTRUCTIONAL GUIDE AND MODEL WEBSITE FOR THE DEVELOPMENT OF A MEDICAL RESEARCH LABORATORY WEBSITE

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DEDICATION

This project is dedicated to those who have dedicated their lives to the service of others.

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by

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THESIS

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The purpose of this thesis dissertation is to document the process that led to the development of an Instructional Guide and a Model Website for a medical research lab to utilize as a resource for creating a website for their lab. A step-by-step guide was developed and utilized to create a sample website to meet the needs of a medical research lab at a specific graduate school, UT Southwestern. The website in addition to the step-by-step guide models and outlines the steps necessary for the creation of a third level website for laboratories at UT Southwestern. The Instructional Guide and Model Website allow different research labs to define their needs and create a website based on these needs. The project addresses the needs of the websites creators (the research lab) as well as the needs of the websites users (visitors to the lab's website). The Instructional Guide outlines the steps necessary for a site's initial planning phase, designing a sites structural framework, the method for collecting and organizing the site's content and the steps to follow in order to create and implement a new site. The Instructional Guide provides resources necessary for the creation of a third-level website at UT Southwestern. The Guide provides resources to aid in site creation and resources that provide institutional guidelines. Following the completion of the step-by-step guide, the Model Website was created for the Laboratory of Molecular Psychiatry utilizing the steps outlined in the Instructional Guide. The Model Website illustrates the features available to a laboratory, follows the guidelines outlined by the University and provides an example of how to fully utilize the Instructional Guide.

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CHAPTER ONE Introduction

Communication

Communication is the process that human beings use to exchange information. This exchange can be visually as well as verbally. Individuals exchange information through the use of symbols, signs, or behavior. Individuals are able to connect to one another through communication. And it is through these connections that individuals are able to form relationships. Individuals are also able to relate to one another and share valuable information through communication. The key to human interactions is finding a way to facilitate and foster communication between individuals.

Throughout history mankind has established ways to communicate, to share their ideas, findings, theories and research with one another and with the world. From the earliest scribbling on cave walls to the written word, from the invention of the printing press to the earliest radio waves, man has shared a desire to share information, a desire to communicate. Today the opportunities to communicate have grown to encompass communication with people around the world. These communication capabilities include the instant communication of the Internet, a vehicle whose capabilities have not yet been fully realized. As forms of communication continue to grow, expand and modify to meet changing needs of today's world, utilizing the web will become an important vehicle for communication.

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Effective Communication

Any form of communication (letters, speeches, articles, web pages etc) must be presented in a way that is clear to the recipient of the communication. Communication requires a message sender and a message receiver (Wileman 6). The mode of communication is only effective if it speaks to the audience in a way that they can comprehend and respond to the information presented. In order to communicate effectively there must be some level of planning and organization of thoughts and goals to create a focus for the communication process. To effectively communicate the communicator must plan what they want to say in order to speak to the audience. They must plan to be effective. Any plan is made to be acted upon. A *faulty* plan — which certainly includes not writing one at all – will doubtlessly be expressed in faulty action and a faulty product. (Hoover 6).

Planning is essential to creating an effective mode of communication. It is, admittedly, easier to write without planning at all, or very much. But the result is either an inferior product or more work in rewriting than would have been needed if outlining had been done. (Hoover 5).

There are many resources that speak on the importance of planning before you begin a project. In this case they are discussing writing, but the project could be translated to represent any mode of communication, including web design.

Planning involves recording the plan for maximum effectiveness. There is something about *writing* that forces precise thinking. Aspects of the question at hand are not overlooked. Portions of the study that are really not vital show themselves and can be discarded (Breen and Blankenship 17).

Significance of Web Use

The web is a specialized form of communication that is rapidly growing in popularity. At the time of <u>Designing Web Usability's</u> publishing in 2000, the author reported that about 10 million sites were currently online in January of 2000 with predictions of about 25 million by the end of (2000) and a hundred million by 2002. As the benefits of web communication continue to grow the world will continue to move towards a broader utilization of this electronic form of communication.

The World Wide Web allows people around the world not only the ability to communicate but also the ability to interact with one another and form connections. It is possible to communicate and form relationships with people we may never have come into contact with in our daily lives. The web provides the tools necessary for a team to work together but to have members located around the world. The tools available to web users include email, web conference calls, message boards, Intranet password-protected domains as well as Internet domains. Intranet capabilities allow departments to provide password protect areas to interconnect departments. The Internet provides immediate and instant access to information. Email capabilities allow individuals to communicate from distances thousands of miles away. By accessing and utilizing these features a lab can publish their research as it happens, add new articles as they are published, and design a website that meets their needs and allows them to meet the needs of the audiences that they wish to communicate. As communicators, and in particular laboratories conducting medical research, continue to find benefits in utilizing the web as a mode of

communication they will continue to move forward employing more forms of communication via the web.

Benefits of the Web

A website has the ability to target multiple levels of comprehension, addressing multiple target audiences, and speak to several target audiences, providing mass communication capabilities. A website can provide answers to frequently asked questions and then point the audience to resources that will answer any further questions. Information can be simplified for a general audiences and more complex information can be available for those who desire a more in depth look at the information. Another advantage is the ability to provide multimedia features to communicate information to a multiple audience level, features that would be unavailable in a print form. A website has the ability to update and change information to keep the site from falling out-of-date. This provides instant and immediate publication of new materials and information; recent publications can be posted as they are published. A website also provides interactivity unavailable with a print format. Questions can be asked and answered via email and other forms of communication only available on the web.

Web Restrictions and Limitations

One must remember that any materials published on the Internet are considered published works, susceptible to copyright laws. Permission of previously copyrighted material must be attained in order to publish these materials on a new site. Also, you must follow the guidelines and restrictions set forth by the institution responsible for the lab's website. These regulations can include how the site looks visually as well as the type of content that can appear on any site associated with the institution. In addition to the guidelines set forth by the institution, a website is only as current as the last update. Information can quickly become out of date if a site is posted and not managed following the initial posting. Finally a site is only as effective as its ability to communicate what it wants to express. The importance of organization spills over into the web. A site must be organized and clear for an audience to choose to continue viewing a site. If a site is difficult to use or hard to understand the viewer will quickly move on to on of the many other sites available online.

Benefits for a Lab

There are many benefits for a lab to use a website as a form of communication. A website is an excellent vehicle for laboratories to utilize in order to communicate. The web allows a laboratory the means to reach for a broader audience. This is beneficial for members of a laboratory who would like to recruit new graduate students and postdoctoral fellows while maintaining a source of information that will speak to members of the general public. An individual with limited knowledge on a subject, such as a family member who is concerned about a relative's medical condition can search for new treatments, support groups, local doctors, researchers studying the condition and many other resources, while a potential graduate student can explore possible research opportunities at a graduate school. The lab is also able to employ new forms of communication that are currently available on the web. Benefits of a website would include, but not be limited to efficient updates, cost effectiveness, the ability to utilize multimedia features, and the ability to reach a wider audience.

1. Efficient updates

Utilizing html (hypertext markup language) text allows easy updates to current pages as new information is discovered, new articles published and new members are added to the lab. A lab member can also have a role in maintaining the site and keeping the sites focus on track.

2. Cost effectiveness

The information that is presented on the web can be more cost effective than printing a brochure, for example. While the initial cost of web design may be similar or higher to the cost of designing and printing an informational brochure about the lab the costs of updates down the road can be effectively lowered. As new information is uncovered the outdated site can be easily updated, by a member of the lab trained to update the content and add new html text. The benefit of the web to a sample brochure or even a promotional CD is that as new information becomes available a site can be updated without having to worry with printing a new brochure or creating a new CD. This also allows a member of the lab to have a prominent role in maintaining the site and the site's content materials. 3. The ability to utilize multimedia features

Multimedia features can be added to a website in order to help explain the information presented on the site. Examples of multimedia features such as animations aid in explaining material in a simplified, concise manner.

4. The ability to reach a wider audience

A website can reach a global audience much faster and more efficiently than a mailer piece or other form of communication. As a part of the University website, the lab sites associated with a particular school can be easily accessed by multiple audiences interested in the research conducted in any particular lab. A wider audience can lead to a greater understanding of the research conducted at the institution. The ability to reach a wider audience can attract future researchers to the field of study, inform the general public, keep current students up to date on the happenings in the lab as well as attracting potential investors.

Objectives of the Project

The goal of this project was to create an Instructional Guide that laboratories at UT Southwestern can use to create a website for their lab. The guide outlines the important steps a lab will need to follow in order to produce a site that follows the guidelines set forth by the University and meets the needs of any lab on campus. The Instructional Guide outlines UT Southwestern guidelines and the resources that are available in addition to other important resources a lab will need during the process of a site creation. A model website was constructed for the Laboratory of Molecular Psychiatry following the steps outlined in the Instructional Guide. The website was designed to meet the needs of this one particular lab, but to also serve as a sample site on how to utilize the guide in site creation.

The Instructional Guide Outlines

- 1. The steps needed to design the structural framework of a site
- 2. How to choose the information that will go on the site
- 3. The guidelines set forth by the University
- 4. Resources for the graphic design of the site
- 5. The steps needed to create the final site
- 6. The steps needed to implement the final site
- 7. The steps needed to evaluate the final site and
- 8. The resources that will be useful throughout the site creation process

Importance of the Project

This project will make a considerable contribution to improving accessibility to valuable information on the research conducted at UT Southwestern. Information must be accessible in order to reach a target audience. This project will help labs effectively communicate with their audiences by making the information for lab creation accessible. The contributions include the creation of an Instructional Guide to outline the steps a lab must follow in order to create a website for their lab by organizing all of the information needed to create a laboratory website into one location. The lab will define their goals

and target audiences, create a structural framework, follow the graduate schools standards for web design, create, implement and evaluate a third level website. Another important feature is that the Instructional Guide aims to meet the needs of the sites creators (the research lab) as well as the needs of the sites users (visitors to the lab's site). The Instructional Guide will allow different research labs to define their needs, create a site based on these needs, and provide resources to meet their target audience(s) needs. The Model Website based on the principles outlined in the Instructional Guide will serve as a example for other labs to observe or follow to create their own sites. The Model Website illustrates how the Instructional Guide can be effectively used to create a site that meets the goals of a lab at UT Southwestern. Anyone creating a site for their own lab can refer to the Instructional Guide and the sample site, providing a model for other labs at UT Southwestern. The Model Website was designed to meet the needs of The Laboratory of Molecular Psychiatry, this site will illustrate the possibilities for other lab's to mimic in their own sites and the guide will allow them to customize their own site. This will expedite the process of website creation for labs who may or may not be familiar with the process of website creation. The combination of the Instructional Guide and the Model Website will aid in future site planning and creation for labs at UT Southwestern. This process will foster efficiency and time management as the process is laid out in a step-bystep manner.

CHAPTER TWO Review of Existing Literature

Purpose of Review

The purpose of my literature review was to examine the information available for websites at UT Southwestern. To fully understand the type of information that would need to go into a guide designed for a specific audience, laboratories at UT Southwestern, I reviewed the principles of layout and design for websites at UT Southwestern and other related sites. I also reviewed guidelines and restrictions set forth by the University and University System. I sought to understand how third level and other types of websites at UT Southwestern are handled.

The review was also used to examine the principles of planning and organization key to effective communication. The information collected was intended to aid in the design of the Instructional Guide and Model Website that will serve as an example for labs at UT Southwestern. The project will be used for the design and creation of websites for labs at UT Southwestern. A design is a creative endeavor to solve a problem. A design is the end result – what you have when the problem is solved. It is the solution (Brainard, 2). The information collected was intended to aid in the design and creation of a useful resource for any of the medical research labs at UT Southwestern, the Instructional Guide and Model Website.

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Lack of Audience-Specific Resources

While there is a vast source of information available on web design for the general public, there is a lack of specialized materials that outline institutional guidelines and resources to outline a step by step process for web design with additional resources all in one place. Due to this lack of information, there is a lack of information on the types of information that should appear on a lab's website. A resource as to what a lab's website should encompass. Examples of this lack of information include a lack of a source on the features necessary for the recruitment of new students to a medical research lab. The graduate students at UT Southwestern, themselves, provided a sampling of this information. I assessed the needs of potential students and what a laboratories website should encompass and include. I sent out a survey to members of the Graduate School Organization (GSO). The survey helped to assess how a site could be used and what the site might aim at as its major goals and audience. Twenty-three students responded with varying responses to what a lab site should entail and encompass. How the website can be used as an online resource for the lab and for the visitors to the site. It was important to assess the needs of the site creators and visitors because "Communication requires a message sender and a message receiver" (Wileman 6). The results of the survey are recorded in the methodology section of this document.

Available Resources

Ample information is available on how to create a site and the steps to take in the design and creation of a new website. Audience-specific resources, such as resources designed for the general public, are readily available. These tools range from the simplified style of <u>Creating Web Pages for Dummies</u> to a more advanced books aimed at professional web designers. However, there is a definite lack of a resources that will walk lab members at UT Southwestern through the steps necessary to design the structural framework of a website and then ultimately create and implement a site that adheres to university standards.

A major source of information for the creation of this project includes the 2003 thesis work of Marla Wilkins. Ms. Wilkins work created a teaching tool for researchers looking to create their own website. One of her recommendations for further study included the design of a template for researchers to use in the creation of their own sites.

Though many of the researchers I talked to were interested in having websites, very few of them had the extra time to research and learn the software required to create one. Providing web page templates that simply require researchers to add content would be useful. UT Southwestern is developing web page templates for its research departments to use, but individual researchers desiring websites would benefit from pre-made web page packets as well. Using templates would save the researchers time and ensure a professional-looking finished product (Wilkins, 48).

Using this project as a resource, I sought to outline the steps needed to design the entire structure of the site, simplifying and expediting the process by fully planning and organizing the future site. This will allow the researcher to outline the structure for the site and select the content to go on the future site. The Guide will provide Ms. Wilkins project as a graphic design resource in addition to the UT Southwestern Templates and other resources for the graphic design of the web pages.

The model website will allow new users flexibility in the visual look of their site while providing a sample structural framework built using the steps in the Instructional Guide. The Guide users can use this structure as an example or to build upon when they are setting up a website. The Instructional Guide and Model Website will supplement the research and work of Ms. Wilkins.

Resources on Design

There are essentially two basic approaches to design: the artistic ideal of expressing yourself and the engineering ideal of solving a problem for a customer (Nielsen 11). The guide needed to lead the site creator through the structural design and graphic design of the site. It was important to be able to organize the pertinent facts of design.

In the book <u>Secrets of Successful Websites</u>, the design company Art & Science describes research they conducted into medical research sites

While reviewing other research sites, many of which were developed and maintained by clinicians and technicians, A&S pointed out how a better designed user interface would have made the sites easier to use. The other sites provided *complete* information, but didn't make it easier for users to find *specific* information. The university committee saw that ease of use should be top priority (Siegel, 36).

This reiterates the point that the design must take into account the ease of use for the visitor. The site needs to be designed to meet the needs of the creator and the needs of the users.

The guide will also aid researchers and lab members not just in setting up a site that is attractive based on its graphic design, but a site with a structural design that provides a useable site.

Usability rules the web. Simply stated, if the customer can't find the product, then he or she will not buy it. The web is the ultimate customer-empowering environment. He or she who clicks the mouse gets to decide everything. It is so easy to go elsewhere; all the competitors in the world are but a mouseclick away (Nielsen 9).

Resources on Effective Communication

I was also able to locate several sources that guide the scientist and artist in the creation of scientific and medical illustrations. These sources discussed design and layout of printed materials. In Mary Helen Briscoe's <u>A Researcher's Guide to Scientific and Medical Illustrations</u>, She emphasizes communication as one of the goals of an illustration. This is a common goal in designing a website.

Communication requires participation and exchange: one giving, the other receiving. It is fluid and dynamic and should be rewarding and pleasurable to all concerned. However, to the scientist who has done the work, the ideas are so familiar and clear that the necessity of making these ideas clear to others may not be obvious ... Ways to organize, simplify, and emphasize facts are essential for clear communication. (Briscoe 1-2).

University Resources

I examined the University of Texas Southwestern published guidelines on website design and layout to create an audience specific guide. It was necessary that I adhere to the guidelines established by the University. The Department of Internet Services and Web Publishing have published these guidelines online at <u>http://www3.utsouthwestern.edu/topdirect/epub.htm</u>. These guidelines were outlined in the Instructional Guide and followed in the creation of the model website so that the sites created utilizing the model will follow University Standards.

Resources associated with the Model Website's Subject Matter

In addition to reviewing the guidelines set forth by the school, I examined several other schools websites. I chose to investigate how other schools set up their departments web pages utilizing the list of the top 20 medical schools in the country generated by US News and World Reports, located on the web at <u>www.usnews.com20</u>. They rank the school according to a variety of different criteria such as assessment scores and NIH grants support to generate their list.

The top 20 schools include, Harvard University, Johns Hopkins University, Washington University in St. Louis, Duke University, University of Pennsylvania, University of California-San Francisco, Columbia University of Physicians and Surgeons, Stanford University, University of Michigan-Ann Arbor, Yale University, University of Washington, Baylor College of Medicine, Cornell University, University of California-Los Angeles, Vanderbilt University, University of California-San Diego, University of Texas Southwestern Medical Center-Dallas, University of Pittsburgh, Emory University, and Mayo Medical School.

While I was able to locate psychiatry pages for each of these schools, some schools websites were harder to find than others. In addition, I was only able to find a limited number of research pages, and the ones I did find were not organized in a way to use as a reference for creating a model site for other labs within their departments. These pages did not seem to address multiple levels of comprehension, nor did they appear to be directed towards multiple audiences. I reviewed sources related to the area of research that the sample site's lab is currently studying in the fields of addiction and depression. I conducted multiple google searches using the terms "depression" and "addiction." When I searched these terms, I found pages such as the National Institute on Mental Health or descriptions and definitions of depression and addiction. I found pages with support groups, self-help, and other descriptive type pages. However, it was very difficult to find pages associated with the research into the areas of addiction. Most of the sites that I visited have minimum research pages available and are not easily accessible; as a result they are not easy to navigate due to the fact that they have not attempted to adjust for viewer diversity. None of these pages were similar to the type of site that you would build a model site around, the sites were to subject specific for the project that I am proposing.

I also reviewed the links between psychiatry and art history throughout the creation process. I studied art movements, styles and key artists linked to psychiatry, in particular depression and addiction. A key movement that I studied was the post-impressionistic work of Vincent van Gogh.

Compiling the information collected from the literature I was able to direct the focus of the creation of the Guide and Model based upon the information available and the information that was lacking. The model designed in this project will aid researchers in the design of their own pages based on the example set by The Laboratory of Molecular Psychiatry's web page.

CHAPTER THREE Methodology

Purpose of Instructional Guide and Model Website

This project was designed and created as a way to simplify the process that a lab at The University of Texas Southwestern Medical Center at Dallas would go through in order to create a laboratory website. As I began to research the University guidelines and resources available it became clear that the information needed to be organized into one location to create an audience-specific resource for labs who want to create an online resource for their lab. A resource was needed to encourage planning and organization in order to produce a useful website. I set out to organize the resources and guidelines set forth by the University as well as the steps needed to create a meaningful and valuable online resource for laboratories on campus at UT Southwestern. Research into these resources and guidelines led to the creation of an Instructional Guide and a Model Website.

The Instructional Guide aims to meet the needs of the sites creators (the research lab) as well as the needs of the sites users (visitors to the lab's site). In order to demonstrate how to use the Instructional Guide I set up a Model Website for the Laboratory of Molecular Psychiatry. This site was designed to share their research to multiple audiences including potential graduate students, fellow researchers, medical and graduate students, postdoctoral fellows, and other interested members of the general public. I worked with

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Dr. Eric J. Nestler, the Chairman of the Department of Psychiatry at UT Southwestern, to design a website based on the research his lab is currently pursuing in the areas of addiction and depression. The method of utilizing the Instructional Guide to create the Model Website serves as an example of planning, organization and time and resource management during the process of creating a website for a lab at UT Southwestern. This will help busy researchers and lab members who desire a quality online resource to efficiently create a new website.

The purpose of this project was to create a document and sample site that would lead site creators as they designed and constructed their lab's site, making sure that the site was clearly planned out before a step was taken to create the graphic design of the site.

Analysis of Target Audience

The Instructional Guide and Model Website were specifically created for medical research laboratories at the University of Texas Southwestern Medical Center at Dallas. The guide is intended to target any member of the lab who desires to create or update lab's third level site.

In order to understand the reasons a lab might want to have a website online, I researched the purposes and reasons that a laboratory at UT Southwestern would choose to set up a lab website. This research included reviewing current sites, meetings with the sample lab's Chair and surveying current graduate students at UT Southwestern. The information gathered from these sources helped solidify the importance of a document to outline the steps necessary to create a site.

Analysis of Online Resources

I reviewed a few laboratory and University websites currently online as a part of the UT Southwestern system. I explored these sites to examine the type of information, audiences and content currently in use by labs at UT Southwestern. The sites I visited included the Shay-Wright, Mohan and the sites associated with the Garner lab including the PGA site. These sites addressed different audiences such as the general public, current and potential students, fellow researchers and potential and current investors. I saw examples of how to address multiple audiences by providing a choice between a simplified or more complex version of the text. In contrast to the goal of reaching multiple audiences I also saw how it is possible to have a more focused single target audience.

Analysis of Researchers needs

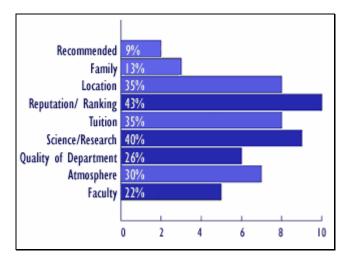
After reviewing sites currently online, I talked with Dr. Nestler, the head of the psychiatry department, to decide what he wanted the site for his lab to be used for, to define his goals and audiences. We discussed that this site could serve as a model for all of the labs in the department of psychiatry. We talked about the major reasons and goals for these sites. It became apparent that the overall focus and goal of the site would be for the recruitment of graduate students and postdoctoral fellows. Like the other sites reviewed, we felt that the site should also be a resource for the general public.

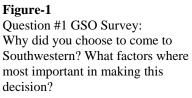
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Survey: Analysis of Graduate Students

Organizing this information I began a preliminary list of goals and target audiences for laboratories at UT Southwestern. Then using these lists and the gathered information as a jumping off point, I created a survey aimed at the graduate students currently enrolled at UT Southwestern. I sent out this survey to the members of the graduate school to find out what they felt like the goal of a website at their current school should entail, including who should be the target audience for such a site. In order for this Guide to meet the needs of multiple audiences I needed to ask what members of these groups might be looking for when they visit a lab's site. The survey included 10 questions on Southwestern, website use and priorities. The survey concluded with a place for any additional comments. Twenty-three graduate students enthusiastically responded to the survey with comments on how a laboratory website should be utilized and designed.

I started the survey by asking the students why they choose to come to Southwestern and what factors where important in making this decision? I wanted initially to find out why someone would choose to come to a graduate school, and in this case why did they choose UT Southwestern in particular. The surveyed students gave multiple responses to this question. The top answers included the school's reputation and ranking as well as an interest in the research conducted at the school. Other answers included information on the department, the lab's location, campus housing, research opportunities, the lab's reputation, financial concerns including possible stipend, the school's facilities, a positive atmosphere, the personality and lab work environment, a friendly staff, good rotations, and the availability of positions.





I then asked the students if they had visited the UT Southwestern website when they were selecting a graduate school and if this site had any influence on their decision on attending Southwestern what was the influence of the website?

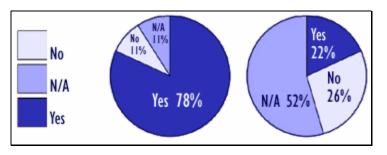


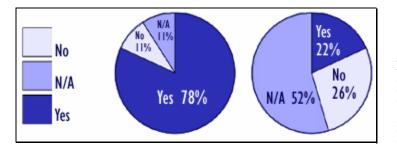
Figure-2

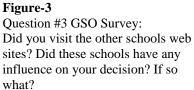
Question #2 GSO Survey: Did you visit the UT Southwestern site when you were selecting a grad school? Did the site have any influence on your decision? If so what?

Seventy-eight percent of the students had in fact visited the schools website when they were going through the process of selecting a graduate school. Of this group of students, twenty-two percent responded that the schools website did have an influence on them when they were choosing a graduate school. The features on the site that influenced the students included, the research labs at Southwestern, the interests of the faculty at Southwestern, the application, the number of faculty members, the number of

departments, the details of first year, the feel of school and the basic information on the school and school resources.

When asked if they had visited other graduate schools websites when selecting a graduate school and if this site had any influence on their decision on choosing a graduate school what was the influence? Seventy-eight percent of the students again replied that they had visited other graduate schools website's when they were going through the process of selecting a graduate school. Twenty-two percent again responded that these schools websites did have an influence on them when they were choosing a graduate school.





In contrast to the responses on influential features the students described other schools features to include, city websites (culture/ places to live, etc), a clear organization of the graduate school, faculty descriptions as well as the basic information in addition to the resources that were similar to UT Southwestern resources.

One student included a very telling statement about the potential of a school's website to influence school choices, "Most of the decision was based on campus interviews, not website(s). *Websites really only affected the <u>choice</u> of schools to send applications to.*"

This statement demonstrates the potential power of a website to attract applicants to a University. This became overwhelmingly clear when another student stated that they "Eliminated schools that didn't have information (they) needed, (they) need(ed) things easy." Another stated that the other schools they investigated had "gobs of information" unavailable or not easily accessed on the UT Southwestern site when they were going through the application process. Yet another student stated, "other schools had better, more interesting sites."

Then the students were asked if they had visited any specific sites on the Southwestern site and if so which ones? Of the students who visited the UT Southwestern site, eightyseven percent of the students visited specific sites on the UT Southwestern site. The sites that the students listed that they visited included, the online application, the registrar, the library, faculty descriptions and informational pages, the catalog, student services, the medical school, and the department listings. The departments and lab's visited include The Department of Neuroscience, Skip Garner's lab, The Center for Biomedical Inventions, The Division of Cell and Microbiology, The Department of Psychology, The Department of Psychiatry, The Department of Radiology, The Department of Microbiology and The Department of Biomedical Communications.

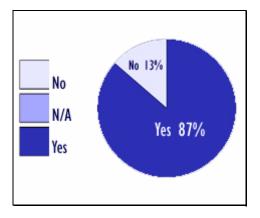
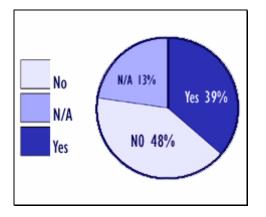
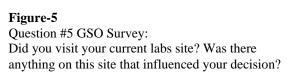


Figure-4 Question #4 GSO Survey: Did you visit any specific sites on the Southwestern site? If so which ones?

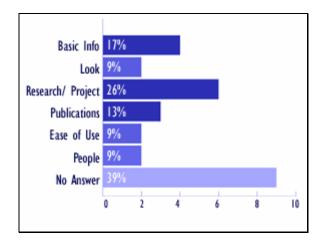
The students were asked if they had visited their current labs site and if there was anything on the lab's site that influenced their decision? Forty-eight percent didn't visit their lab's site, some of these because a site did not exist then or now.



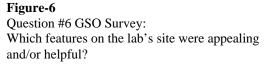


Of the thirty-nine percent who visited their current lab's site, the projects underway in the lab where of great interest to the potential students as well as the area of research being studied. One student stating that the "substance of the lab matters most" while another student added that a "poorly organized or visually unappealing site is an immediate turn off." Yet another student verbalized what seemed to be a growing consensus from the survey results stating that the site was "much to plain, (it) made cool research sound dull."

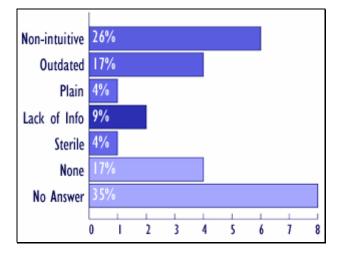
When asked which features on their current lab's site were appealing and/or helpful, twenty-six percent found the information on the research conducted in the lab and the current projects underway to be appealing features on the lab's website. Other features that were appealing included cleanliness, organization, architectural design, faculty and

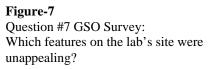


student information, recent publications, easy to find and well organized basic information.

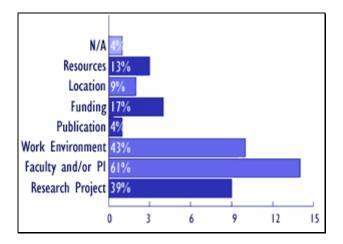


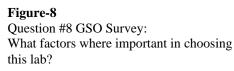
In comparison, when asked which features on the lab's site were unappealing, the students found non-intuitive sites such as the "New UTSW" website to be very unappealing. Other unappealing features included plain, outdated, sterile websites that had a lack of Information. This includes poor layout and design. They had a desire to see a more visually appealing site. They also wanted to see the more human side of the lab.





The survey then asked what factors where important in helping the student choose their current lab. It was important to gather this information, in order to see what the students were looking for in a lab. The information gathered from this question would aid in possible goals for a future website. The students gave multiple responses to this question. An overwhelming sixty-one percent of the students felt like the PI and the faculty in the lab were the most important factors in selecting a lab. This factor went hand in hand with the forty-three percent who also said that the work environment and lab personality were important in lab selection. The really wanted to see the lab and get to know the people who work there to get the feel of the lab.

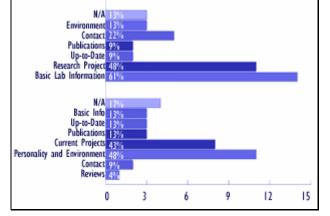




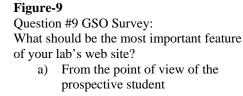
The students had a lot to say when they were asked what should be the most important feature of their lab's website from the point of view of the prospective student and from their current point of view as a student in the lab. The students felt that information on the research and work conducted in the lab was of utmost importance. They felt that the basic information was the most important feature for potential new students to a lab. This basic information should outline the big picture and include information on what they study and why it is exciting, the significance of lab, the department the lab is associated with,

the lab's size (resources/ members), the current projects, acceptance information,

program information, information on if they are seeking new students, contact



information, and a description of the people in the lab with pictures of personnel.



b) From your current point of view

When answering the second part of this question, what should be the most important feature of their lab's website from their current point of view, the responses shifted to address what they are currently seeking in a website for their own labs. Many stated that the focus should be the same as the focus for potential students. Others expressed that as current students they want to know what the work environment is really like in the lab, including "Good honest reviews of lab members (current and previous)". Current students are looking for information about their working environment, links to relative databases and labs, papers that have come out, how to contact their Post-Doc, what happens when people leave lab, links to websites of former members, list of publications, and any clinical opportunities for current students.

The final survey question asked the students what function should a lab's website have? Although the results were a mix, the responses echoed the questions from earlier in the survey, a focus should be placed on sharing the lab's research and personality. One student felt that a lab's website should "Share what the experience would be like if you were a student in the lab." The group yet again felt that the basic information and basic feel of the lab should be a focus as well. This basic information includes "What we do, are like, etc" A lab's website should be used as a recruitment tool and a means to make the lab better known. The site can include published works and "inform people interested in pursuing (this) particular area" of science. One student wanted to see a "list of lab members and possibility of (their) own (web) pages" off of the lab's main page as a way of sharing their own thoughts about their research.

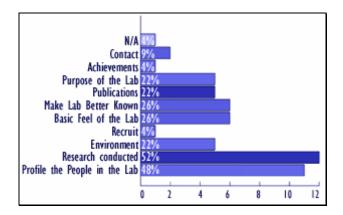


Figure-10 Question #10 GSO Survey: What function should a lab's website have?

The site can address the "appropriate qualifications (needed) to work in this lab" and provide an "attractive, easy to use site." They also felt that a lab's website can address multiple audiences including the general public. The site can "inform the public/ nonscience about research in a way they can understand with current links to more scientific(ly) intensive (pages) for those interested" in a more in depth look at the work. Overwhelmingly the answer for every question was to share the research that goes on in their lab but to try and find a way to honestly portray the lab and express the humanity that exists there. These students are excited and passionate about their fields of study and the research they are conducting. They share a desire for others to see the value and importance of this work. They want to find out about others work as well as sharing their own research and results. They observed features and information unavailable on the UT Southwestern sites, either because they could not locate the information on the "nonintuitive" site or the information was currently unavailable. They also found the UT Southwestern site frustrating to search for information that may or may not be available. They share a desire for their school and lab to create visually appealing sites that are clear and concise to use.

At the end of the survey I provided space for any additional comments. One student added that "Websites are not static, neglected websites are worse than no website", while another added that the "recent revamp of all university sites is good but has created a mess of unusable links." These final comments reiterated that while these students share a desire to have a website for their lab, they want a tool that will be useful. A site that is current and easy to understand and utilize. This echoed the importance of an organized, well-planned site. The students seem to prefer no site at all if they cannot have a site that meets their needs. At the conclusion of this survey I observed that it is important and necessary to create a document to address the goals and expectations of current lab members that allows them to create a meaningful and useful website for their lab that stays with in the parameters of the University guidelines.

Review Analysis of Target Audience

The results from this informal survey were immensely valuable as I began to organize the Instructional Guide. Using the information I gathered from the current graduate students, other labs sites on campus and at other schools, as well as sites frequented by the general public I began to outline the steps someone would follow to create a website. I used this outline in addition to the survey results and web research to create the Instructional Guide.

Collection of Content for Instructional Guide

I began to collect content information for the Instructional Guide based on the searches, survey and online resources. I searched the UT Southwestern site for the resources available to university students, potential students, faculty, investors and employees. The source of the surveyed students frustration of the school's site non-intuitive site design and structure became apparent, as I had to search multiple locations for information. As the search continued I made two lists of school related links to stay organized. One list encompassed the links, resources and information that a potential or current student would find useful such as campus housing. The other list covered any link or guideline UT Southwestern has provided on website creation at UT Southwestern. This list included guidelines and regulations as well as resources such as medical illustration services. This was a time intensive process that led to two comprehensive lists of resources available for labs at UT Southwestern to use when creating a lab website.

In addition to gathering resource lists related to UT Southwestern I searched the University of Texas System's site for any further resources provided by the University System. I gathered links to resources related to writing tools, English as a second language resources and copyright restrictions and regulations. To complete the search I investigated sites such as the CDC or the NIH to gather resources that a lab might link to for further information on the condition studied in the lab. Links were also gathered based on their usefulness for the general public. Once I had completed this gathering of information I began to outline the guide based on the collected information.

Design of the Instructional Guide

The Instructional Guide was designed to lead someone with little or no experience with web design through each stage necessary for web development in the design process. The guide was designed to help the site creator identify goals, identify a target audience(s), map out a general website structure, identify the content for the future site, produce, implement and finally evaluate the site.

The final design of the Instructional Guide moved from a two page outline into a more extensive fifty-five page version that would walk through all of the possible steps necessary for website creation and provide useful resources. This guide was specifically designed for a laboratory at UT Southwestern. The final version was created as a PDF so that the document can be filled out on the computer or printed out and manually filled out depending on the users needs. This format will help with portability, allowing multiple people the ability to be a part of the site creation process. This feature will allow the multiple site creators the ability to fill in the guide and email or share the file with other creators. The PDF form will also allow copy and paste capabilities to create an ease of use when moving names of links and pages form the guide to the html format. The PDF format can also be printed out and notes added as needed allowing the document to be easily transported between site designers to graphic designers.

The guide was designed to walk the site creator through five phases as they go about creating a future site. The five phases are analysis, design, development, implementation and evaluation. The guide includes an introduction as well as directions on how to use the Guide. A resource section was placed at the end of the guide to point the user to additional resources such as how to find artwork or how to commission a medical illustrator, writing tips and tools as well as a list of links.

Development of Instructional Guide: Creation of the Analysis Phase of the Guide

The goal of the analysis phase of the guide is to force the lab to define the future sites goals, target audience(s) and the type of site content that they would like to have on the future site. In the Guide, I explained to the user that the first step in designing any

website is to define your goals. Without a clearly stated mission and objectives the project will drift, bog down or continue past an appropriate endpoint (Lynch & Horton, 1). This phase of the Guide was designed to increase efficiency and aid in time management down the road. The analysis phase helps the user clearly define the focus and scope of the future site.

The first step of this process is creating a goal-defining list. I set up a list of possible goals and a ranking system to rank the goals. These goals include choices between lab recruitment, information for potential students and/or current students, intradepartmental communications, information on the lab's research, information for the general public, detailed information about lab and/or general information about lab, information on current projects, information on former projects, information on job opportunities, information on current lab members, information on current faculty, information on former faculty, recent publications, recent results, information on funding and support, and a blank area where the site creator may define any other goals. The site creator must choose from this list of possible goals and then rank the importance of this goal for their future site from the score of five for a high priority to a score of one for a low priority. The information gathered during the analysis phase of my research was utilized to create the list of goal choices on this list.

Once the sites goals are defined and ranked by importance, the site creator must then define and rank the target audience(s) for the future website. As with the goal defining

section, I provided a list of possible target audience(s) and places for guide users to add additional audiences to fit their individual needs. The possible audiences included potential students, current students, faculty at UT Southwestern, faculty at other research institutions, the general public, potential and current investors as well as any other audiences defined by the users.

Using the target audiences, I complied a list of content type that might go with each audience while leaving room for the creator to add any other content that they would choose to include. The content lists where based upon the information gathered from reviewing sites on and off campus, reviewing survey results and university guidelines. The guide again forces users to make decisions about how important this information is for the future site. I set up this section of the guide to help the site creator pick the type of information they want on the website and base these decisions upon the goals and the target audience(s) defined in the initial steps of the Guides analysis phase. While this process includes the ranking system utilized earlier I intentionally placed the ranking system at the top of each page to remind the user how to use the ranking system. Each list of possible information to go on the website is customized to correspond with the information that each particular target audience would find meaningful and useful. As with the earlier steps, the final page in the section is blank to allow the creator to add any information they may need based on any audiences they may have added to the list.

The list of information for Potential Students includes,

- 1. Links to information about UT Southwestern,
- 2. FAQ's for potential students,

- 3. School ranking and reputation,
- 4. Current projects,
- 5. Former projects and results,
- 6. Research descriptions,
- 7. Background information on lab members,
- 8. Quotes from lab members,
- 9. Basic information about the lab,
- 10. Glossary of terms for research audience,
- 11. Images, Recent articles and publications,
- 12. Recent books,
- 13. Atmosphere in the lab,
- 14. Work environment,
- 15. Size and resources,
- 16. Funding Information,
- 17. Department the lab is associated with,
- 18. Contact Information,
- 19. Links to information about Dallas,
- 20. Links to information about living in Dallas,
- 21. Housing Information and
- 22. Other information that the site creator chooses to add to the list.

The list of information for Current Students includes

- 1. Links to information about UT Southwestern,
- 2. Links to UT Southwestern Resources,
- 3. Recent articles and publications,
- 4. Recent books,
- 5. Calendar of events in the lab,
- 6. Annual events,
- 7. List departmental meetings, journal club, etc,
- 8. List annual social events,
- 9. Links to lab resources (images, presentations),
- 10. Speaking engagements,
- 11. Research Descriptions,
- 12. Current projects,
- 13. Clinical Opportunities,
- 14. Images,
- 15. Reviews of the lab members,
- 16. Links to relative databases,
- 17. Work Environment,
- 18. Information on former lab members,
- 19. Lab Resources,
- 20. Educational Aids,
- 21. Campus maps and resources,
- 22. Job opportunities,

- 23. Contact Information and
- 24. Other information that the site creator chooses to add to the list.

The list of information for Faculty at UT Southwestern includes,

- 1. Recent articles and publications,
- 2. Recent books,
- 3. Calendar of events in the lab,
- 4. List departmental meetings, journal club, etc,
- 5. Research Descriptions,
- 6. Current projects,
- 7. Links to lab resources (images, presentations),
- 8. Speaking engagements,
- 9. Images,
- 10. Contact Information,
- 11. Research tools and resources and
- 12. Other information that the site creator chooses to add to the list.

The list of information for Faculty at other Research Institutions includes

- 1. Recent articles and publications,
- 2. Recent books,
- 3. Calendar of events in the lab,
- 4. List departmental meetings, journal club, etc,
- 5. Research Descriptions,
- 6. Current projects,
- 7. Links to lab resources (images, presentations),
- 8. Speaking engagements,
- 9. Images,
- 10. Contact Information,
- 11. Research tools and resources and
- 12. Other information that the site creator chooses to add to the list.

The list of information for the General Public includes

- 1. Research Descriptions,
- 2. Current projects,
- 3. Links to information about UT Southwestern,
- 4. FAQ's for the general public,
- 5. Background information on lab members,
- 6. Glossary of terms for general public,
- 7. Recent articles and publications for the general public,
- 8. Links to general information about the research,

- 9. Links to basic clinical information about the research,
- 10. Treatments for medical condition lab is researching,
- 11. Basic Information medical condition the lab is researching,
- 12. Signs and Symptoms of medical condition lab is researching,
- 13. Resources for the general public,
- 14. Current Findings,
- 15. Images, Contact Information and
- 16. Other information that the site creator chooses to add to the list.

The list of information for Potential Investors includes

- 1. Research Descriptions,
- 2. Current projects,
- 3. Current projects results,
- 4. Recent articles and publications,
- 5. Recent books,
- 6. Images,
- 7. Contact Information and
- 8. Other information that the site creator chooses to add to the list.

The list of information for Other Target Audiences is blank to allow the creator to add

any information they may need based on any audiences they may have added to the list.

Development of Instructional Guide: Creation of the Design Phase of the Guide

Once the sites goals, target audiences, and initial information needed for each audience is defined and ranked the guide leads the user from the analysis phase into the design phase. I stressed to the site creator that this is the phase in which they will use the information collected in the analysis phase to design the structure of the site. This phase is not to be confused with the *graphic design* stage that will be addressed and created during the development stage of the Instructional Guide. The Design phase outlines and creates the architectural framework upon which the future site will be built upon. The sites

framework must be completed before the site creator can begin to think about the visual look or graphic design of the website.

The steps in the design phase lead to the creation of structural map. This map will be used as an outline for the graphic designer to utilize when they create the visual look of the site later during the development phase. The Instructional Guide stresses that skipping the structural design will lead to problems costing extra time, energy and money. The site creator must maintain high efficiency in order to create the future site that the lab wants and needs. The planning from the analysis phase combined with the structural framework keeps the future site on track for high efficiency.

Steps of Design Phase

The first step in the design phase of the Guide is to review the information gathered in the analysis phase. The site creator records the major target audience(s), the major goal(s) and the top priority for the future website. Once these features are reviewed and recorded the importance of the structural framework is explained and the site creator learns how and why to create a site map. I explain to the user that the map shows the creator and any future designers the architectural structure of the future site. The map outlines the pages that will go on the site and their relationship to each other. The structural map that the user created will be very important in setting up the future site.

A website is made up of a home page that branches off into a series of secondary and tertiary pages. In the design phase a structural map is sketched out to decide which pages

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will branch off of the home page. The map also includes any pages that branch off of the secondary pages to become tertiary pages. The pages that branch off of the home page are based on the major goals and target audience(s) and the rankings defined in the analysis phase. The website pages can be prioritized by utilizing different sized boxes on the map. The user may use the blank forms I have provided in the Instructional Guide to fill out their own map or use the forms as a reference to sketch out their structural map on a separate sheet of paper. The guide shows the user how the information outlined in the map will translate into the future site's navigation. The information inserted in each of the boxes of the structural map will directly correspond to a page on their site. The map outlines how future site visitors will be able to navigate through the future site.

Development of Instructional Guide: Creation of the Development Phase of the Guide

Once the structure and framework of the future site is set up, I instruct the user to move into the development phase of site creation. In this phase the user will need to make decisions on who will create and manage the future site. They will also review UT Southwestern guidelines for laboratory websites in preparation for collecting the future sites content. This content, as well as the eventual graphic design, or look, of the site must adhere to the guidelines and standards set forth by the University. The information collected during the analysis phase will guide the user as they decide the information to be used for the websites content (text, artwork and links).

University Guidelines

The guide provides the guidelines and regulations set forth by the University and the University System. I collected this information from the University's website. The guide provides who the user will contact with questions concerning the website and the guidelines associated with website creation. These guidelines were organized within the guide to help with time management. I outline what the site creator must adhere to when creating a future site. The University of Texas Southwestern Medical Center's guidelines are available online at http://www3.UTSouthwestern.edu/topdirect/epub.htm, these guidelines include:

Graphic Standards for Pages Published on the UT Southwestern Website

The following graphic standards must be followed for all pages on the UT Southwestern website that are to be viewed primarily by external lay audiences:

- 1. All pages must have the UT Southwestern logo bar at the top
- All pages should have a white background color. This can be specified as the Netscape tag BODY BGCOLOR="ffffff"
- 3. All pages must tell who is responsible for maintaining them and the date they were last updated and copyright information

In Addition to the information gathered online I reviewed The UT Southwestern Handbook of Operating Procedure (January 1998) General Policy, including WWW, which states:

1. Authorship of each page must be indicated on the document.

- 2. Documents that bear the UT Southwestern name should follow the standards set forth in UT Southwestern's Graphic Standards and Publication Policies
- 3. Documents may not be used for commercial purposes.
- 4. Documents may not be used solely for personal purposes. Personal use is acceptable only if such use is related to or incidental to the performance of the user's responsibilities and duties to UT Southwestern.
- 5. Documents must adhere to current copyright law, and the user is responsible for getting permission before a copyrighted work is reproduced or used.

The University of Texas System has provided regulations and guidelines for the use of copyrighted materials. I included this information in the Instructional Guide to aid with copyright questions in site creation. Internet Services contact information was also provided so they can address any additional questions and concerns that the user may have during the development phase.

Development Phase of the Guide: Collecting Content

Once the sites creator is familiar with the framework that they will be working and the structural map is completed they may begin to organize and collect the sites content. I define content in the guide to include but not be limited to, artwork, links and text. Before collecting any new content I set up a quick inventory survey to find out what resources they currently have available to use for the future site. The inventory helps the user think about what type of content they already have and what they will need to collect in order to meet their goals for the new website.

The inventory asks:

- 1. Do you already have your images?
 - a. If so, do you have the copyright ownership to these images?
 - b. If not, do you have someone to create these images?
 - c. If not, do you know where to go to get rights free images?
- 2. Do you need to contact a medical illustrator?
- 3. Do you have a budget to cover these images?
- 4. Do you know which sites you would like to link to?
- 5. If not, who will gather these links?
- 6. Do you have the text for your site?
- 7. Who will write this text?

The inventory is intended to assess the resources currently available and assess what will be needed to supplement these resources in order to make the content for the future website complete. The inventory outlines some of the upcoming steps in the developmental phase.

Once the site creator has decided what they have available and what they will need the guide instructs them to organize, assemble and edit the content for the website.

Development Phase of the Guide: Naming Mechanisms

At this point in the guide, before any files are physically gathered into one place, the guide outlines how to organize future content files. One of the keys of efficiently managing time and staying organized concerning multiple files is to utilize a consistent naming mechanism. I outline how to name each type of file (artwork, link or text file) and place the file in a specific folder based on the file type and future location on the site. It is not necessarily vital that the user follow the naming mechanism I outlined in the Guide, but it is necessary and important for the user to have a consistent naming mechanism in

place. This system will keep the files organized and easy to locate, maintaining the high efficiency stressed in the Guide. The site creator is instructed to use a organizational system as they collect the content during the next steps as outlined in the guide. Lists are provided for each type of content (artwork, link or text) so they can be filled out as content is collected to aid in organization. The lists document the file number, file name, file location (folder), the pages the file is intended to be used on, the file type and any comments about the file that will help the site creator as they create the new website.

Development Phase of the Guide: Organize, Edit, Assemble

The guide then provides a few helpful hints before the user begins to collect the future sites content. The user is instructed to refer back to the structural map and goals outlined in the design phase to use as a resource as they collect the sites content. The content should be reflective of the goals and target audiences defined in the analysis phase and the needs of these groups. The site creators are instructed to fill in the artwork, link and text lists as they gather the content with a reminder to stick to the naming conventions defined earlier or to the naming conventions they have defined and decided to use instead. They are also reminded that content resources are available at the end of the guide. It is during this developmental phase that the guide instructs the user to

- 1. List the information needed to meet your goals,
- 2. Collect or commission the images to go on the website,
- 3. List the articles/books to link to on the website,
- 4. Determine links to other institutional pages or external links, and
- 5. List areas of the site that you need text for.

Development Phase of the Guide: Graphic Design

Once the structural site design is complete and the content has been collected the site creator can begin to design the look and feel of the website as well as the overall graphic design and page design. I gave users a brief overview and then pointed them to resources currently available to aid them in the graphic design of their future site. These resources include templates provided by UT Southwestern, *The Busy Researcher's Guide* created by Ms. Wilkins, and instructions on how to locate a Medical Illustrator.

The Guide outlines how the final stage of the developmental phase is to utilize all of the gathered content, page design and page structure to create the site. The site creator is instructed to insert the content into the pages and link the pages together. The developmental phase then outlines testing the site and submitting it for approval in the implementation phase of the Guide.

Development of Instructional Guide: Creation of the Implementation Phase of the Guide

Up until this point the users new site has been active to allow them to test it but it has not been open for online Internet viewing. A site needs to be active so that when the user submits the new site for approval the UT Southwestern Office of News and Publications can view the site online, as it will appear to future site visitors. The guide instructs site creators to make the site active and submit it to News and Publications during the implementation phase. The guide states that following the approval of the UT Southwestern Office of News and Publications the site will be ready to post to the World Wide Web and the user will be able to make their site available for online Internet viewing on and off campus, moving from the development phase into the implementation phase.

Development of Instructional Guide: Creation of the Evaluation Phase of the Guide

The final step in the creation of a new website is outlined in the evaluation section of the guide. The user is instructed to evaluate the effectiveness of this website to meet their ultimate goals.

Development of Instructional Guide Format

Once I completed the word document for the Instructional Guide I converted the file into a PDF document. I then added check boxes and text boxes to the PDF file so that the document could be filled out on the computer and easily transported between parties collaborating on a new website's design. The document can also be printed out and filled out manually on paper.

Implementation of Instructional Guide: Creation of the Model Website

I used this Instructional Guide and the steps outlined within this document to create a website for the Laboratory of Molecular Psychiatry. This website will serve as and

example of the Guide in action. The Guide was designed to facilitate and aim to meet the needs of laboratories at UT Southwestern. So the Laboratory of Molecular Psychiatry's website illustrates how the guide can help a lab meet their own needs and goals. The Model Website illustrates how any lab on campus can follow the step-by-step instructions to create a site and utilize the resources within the guide to create a site.

Implementation of Instructional Guide: Analysis for Model Website

I began at the analysis phase by meeting with Dr. Nestler to discuss what they wanted out of a website, what types of features they envisioned and what they saw the future website being used for. I used the information I gathered from multiple meetings and emails to assess the major goals and target audiences that the lab wanted to address. I then used this information to fill out the charts in the analysis section of the Instructional Guide.

The lab had a number of reasons for wanting to revamp their current site. At this point in the process I had to focus on the steps outlined in the guide and clearly define the sites goals and audiences to solidify the scope and purpose for the site. Although it was tempting to begin to think about the future visual look of the site the guide forced me to stay on task. I filled in the chart to define and rank the goals for the Laboratory of Molecular Psychiatry's new website.

According to the information collected from Dr. Nestler and then filled into the guide, the site goals of recruitment and having information on current projects ranked at the highest

priority of five, these goals were followed by sharing the lab's research and having information for potential students ranking at a high priority of four. The moderate priorities with a ranking of three included, general information about lab and information on current lab members. The final goal for the site, informing the general public, had a ranking of a low priority of two.

What are your goals?				
Rank	putx			
12345	~	Recruitment		
12345	~	Have information for potential students		
12345		Have information for current students		
12345		Intradepartmental Communications		
12345		Interdepartmental Communications		
12345	~	Share lab's research		
12345	~	Inform the general public		
12345		Detailed information about lab		
12345	~	General information about lab		
12345	~	Current Projects		
12345		Former Projects		
12345		Job Opportunities		
12345		Clinical Opportunities		
12345	~	Current Lab Members		
0000				

Figure-11

Analysis Phase in the Instructional Guide: Defining and Ranking the goals for the Laboratory of Molecular Psychiatry's new website.

Who is your target audience(s)?				
Rank	put x			
1 2 3 4 5	~	Potential students		
12345		Current students		
12345	~	Faculty at UTSouthwestern		
12345	~	Faculty at other research institutions		
12345	~	General public		
12345		Potential and Current Investors		
12345		Other		

Figure-12

Analysis Phase in the Instructional Guide: Defining and Ranking the target audiences for the Laboratory of Molecular Psychiatry's new website.

Continuing through the analysis phase I defined and ranked the target audience(s) for the Laboratory of Molecular Psychiatry's new website. According to the information collected from Dr. Nestler and the site goals I had just defined potential students with a ranking of five were defined as the highest priority. The faculty at UT Southwestern were labeled a moderate priorities with a ranking of three included. Faculty at other research institutions and the general public completed the target audiences for the new site and had

a ranking of a low priority of two.

As I continued through the steps of the analysis phase I defined and ranked the type of information each target audience would need to have on the website.

Potential Students (5) Ranking at the highest priority of 5 • Current Projects Ranking at a high priority of 4 Research Descriptions Ranking at a moderate priority of 3 • Links to information about UT Southwestern • Basic information about the lab **Recent Articles and publications** • Recent books • Faculty at UT Southwestern (3) Ranking at the highest priority of 5 **Recent Articles and publications** • • Recent books Ranking at a high priority of 4 • Current Projects Ranking at a moderate priority of 3 Research Descriptions Ranking at a low priority of 2 • Contact information Faculty at other research institutions (2) Ranking at the highest priority of 5 Recent Articles and publications • Recent books Ranking at a high priority of 4 • Current Projects Ranking at a moderate priority of 3 • Research Descriptions Ranking at a low priority of 2 • Contact information General Public (2) Ranking at a high priority of 4 FAQ's for the general public • • Glossary of terms for the general public Ranking at a moderate priority of 3 • Resources for the general public Ranking at a lowest priority of 1 • Basic information on medical condition lab is researching Once I had defined my goals, defined the target audiences and selected the type of information that I wanted for each audience I was able to move from the analysis phase into the design phase.

Implementation of Instructional Guide: Design for Model Website

As I began the design phase, utilizing the information I collected during the analysis phase, I began to prioritize the information I had collected. I defined my major target audience for the website as potential students. The major goals were defined as recruitment, sharing the lab's research and current projects. The top priority for the site was defined as Recruitment of graduate and post-doctoral students.

Once the goals were clearly defined with a focus on recruitment, utilizing the lab's research as an important selling point, I began the first of many structural maps. I went through several revisions to solidify the site's structure. To create the map I had to review my goals and top priorities. I organized the map to reflect the areas that were my top priorities with larger boxes and more boxes on the map. This work saved me time later, so I didn't have to waste time redoing pages because I hadn't been organized early on. Using the final version of the structural map I finalized the navigational names that would appear on the final website.

Implementation of Instructional Guide: Development of Model Website

The development of the site began after Dr. Nestler approved the structural map. At this point in the guide, the user is instructed to decide who will create the site, as well as manage and act as a content advisor. I assigned myself to create the final site to continue utilizing the entire guide to create this sample site. Dr. Nester was assigned the role of content advisor and the lab will be responsible for the site's future updates and management. My time frame for creating this site was limited to a couple of months, which placed a mild deadline on the project. I then chose to design the site instead of using the templates provided by the University.

Collection of Content

I selected the content for the Laboratory of Molecular Psychiatry based on the goals I outlined during the analysis phase and the map I created during the design phase. Content decisions were also made based on the pages on which the content would go.

Most of the images that would go on the site were already available for use. Dr. Nestler provided a number of charts and figures that needed minor adjustments for posting to the web. In addition I had created a number of illustrations and animations earlier in the year in anticipation of their use on the future site. The images used on the site were either owned by Dr. Nestler or myself. A budget was not needed to commission or purchase additional images. In addition to these images, I searched through the University database for any additional images that would supplement the content. Dr. Nestler provided a file that held most of the text for the site. I went through this text file and cut down the amount of text based on the text that the structural map called for. I then created a list of glossary terms and questions for the frequently asked question section of the website. These files were sent to Dr. Nestler who reviewed, edited and revised the final versions that would appear on the site. Finally, the members of the lab were sent a short bio form to fill out for their section in the lab members' portion of the site. Dr. Nestler had the final approval on all of the text that would appear on the website.

I chose links from the list of resources at the end of the guide. I again made content decisions based on the information collected during the first two phases of the Guide. I made decisions on which links to choose based on

- 1. The pages they would go on based on the map and
- 2. The goals I outlined during the analysis phase

The links were selected for the two target audiences that they would speak to. As with all of the other content pieces for the site I had the list of the final links approved by Dr. Nestler.

Organization of Content

I followed the naming mechanisms defined in the guide to organize my files. As I located, created, modified or selected content files they were placed in their respective folders. The file information was then recorded on the corresponding organizational list; art list, text list or link list.

I had completed the sites architectural framework and I had a map of the future site. I had defined my goals and collected the content for the site. With the organization of the site complete, the guide instructed me to move into the graphic design stage of the process. I was now ready to move from designing the structure of the site to designing the look and feel of the website. I began the websites graphic design to prepare for the upcoming page design.

Graphic Design of Model Website

This Model website serves as an example on how to use the Guide, but as a sample I needed to walk through the design steps in order to create a look that will meet the needs of this lab. At this point in the guide, the user is instructed to utilize one of the UT Southwestern templates, utilize *the Busy Researcher's Guide* created by Ms. Wilkins, or contact a medical illustrator in the resource section. Using the guide, I appointed myself as the Medical Illustrator who would create the design for the website.

Review design needs of sample lab

I decided to survey a small group from his lab to assess what they would like to see on a website. The survey was similar to the GSO survey in many ways, the features that were contrasting to the previous survey asked questions related to color and art preferences. Of the lab members surveyed, they overwhelmingly chose blue as a favorite color. Interestingly enough, those who responded selected a popular color. Americans prefer blue to every other color, according to a study done at Western Washington University

(Fehrman & Fehrman 8). In addition to the popularity of the color blue, I felt that the color would aid in the representation of the research visually. [Blue] symbolizes depression, sadness, and isolation (Fehrman & Fehrman 51).

The other distinctive question I asked the lab members was what their favorite art movements were. The responders were split between forms of modern art and highly realistic art. I decided to supplement this information with research into a connection between the subject matter and a visual look. According to the unpublished website material provided by Dr. Nestler, "it wasn't until the middle part of the 19th Century that the brain became the focus of efforts to understand the pathophysiology of this disorder." (Nestler, 13). I decided to take a look at the art movements and styles present in the world around this time period. During the mid to late 19th century impressionism followed by post-impressionism were characteristic styles of the day. In the postimpressionists, I saw a link between the work of Vincent van Gogh and this new focus on studying brain disorders. I decided to take a look at some of Vincent van Gogh's works for inspiration for the visual look for the site.

I also sought to tie in features that would be visually appealing but also speak to the researchers knowledge. Images such as the chemical structure of a number of drugs currently under research in the lab were included in the final design for visual as well as intrinsic value.

Design Decisions

I created three different visual looks for Dr. Nestler to chose between for the future design of the site. Examples of a sample home page and subsequent secondary pages were created. When submitting the choices, I also included sample text and images on the secondary pages to help the lab visualize the pages, as they would appear online with the content added.

Based upon the lab members' attraction to blue, as well as the connections to the subject matter the color blue was utilized throughout the three designs. One involved blue as the focal color; another with blue as the complementary color and in the third choice blue was used as a minor accent color. I also took a look at the color choices and styles reminiscent of the post-impressionists and in particular, the work of Vincent van Gogh to aid in the visual design of the pages.

The three choices were presented to Dr. Nestler. For each sample site I included a sample home page and a sample secondary page. The secondary pages all had the same sample text and image to ensure that decisions were made based on the graphic design of the site and not based on sample site content. Dr. Nestler reviewed the design choices with a small group of peers before making a final decision concerning the overall graphic design of the Laboratory of Molecular Psychiatry's new website.



Figure-13

Graphic Design Choice #1 for Model Website

Sample home page and sample secondary page with blue as the focal color

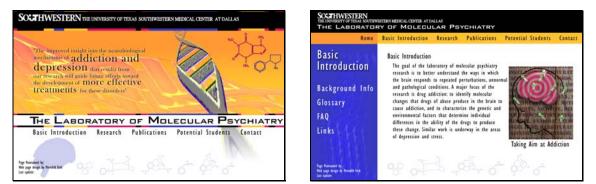


Figure-14

Graphic Design Choice #2 for Model Website

Sample home page and sample secondary page with blue as the complementary color

SOCATHWESTERN THE UNVESTITY OF TEXAS SOUTHWESTERN MERICAL CENTER AT DALLAS The Laboratory of Molecular Psychiatry	SOCETHWESTERN THE UNPORT OF TAXAS SOCTION STREAM OF MALECULAR AT DALAS The Laboratory of Molecular Psychiatry The mark of all outs from them that the fereinment of some from transmiss for address	
"Dur march will gole have ellen toward be levelspaces of more effective treatments for addicions and depression"	Home Basic Introduction Research Publications Potential Students Basic Introduction Basic Introduction Encoder Encoder	
Basic Introduction Research Publications Potential Students Contact	Units addiction, and transmitting of the prain to cave addiction, and to cave addiction, and to characterize the generation and environmental factors that determine individual differences in the ability of the drugs to produce these change. Similar work is underway in the areas of depression and stress. New Finance It: The appropriate field that the second stress areas of depression and stress.	ttion

Figure-15

Graphic Design Choice #3 for Model Website

Sample home page and sample secondary page with blue as the minor accent color

Of the three choices, Dr. Nestler selected choice number two (Figure-14). Minor adjustments to the design were suggested and the design was modified to meet the lab's needs. These suggestions included adding Dr. Nestler's name to the title of the site.

Page Creation

When the final site design was approved, I started constructing the pages. I followed the structure I set up when I created my structural map. As the first few pages were completed I began to test these pages to see how they would look at different screen resolutions and formats. I discovered that the secondary page design took up too much space at lower resolutions and most of the body text was lost. The current design would cause the site user to have to scroll to the left and right to read the body text. Realizing that this would be a bad situation, I refined the design to open up more white space for body text.

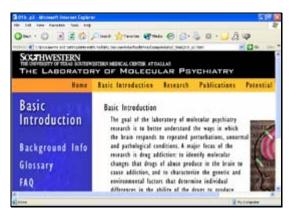


Figure-16 Example of the initial graphic design for the secondary pages at 800x600 screen resolution



Figure-17 Example of the adjusted graphic design for the secondary pages at 800x600 screen resolution

The pages were created utilizing the macromedia program Dreamweaver. While I constructed the pages I created a document to outline step by step how the pages were constructed in Dreamweaver to aid in any future updates, revisions or replacements. This file also outlines the locations of all of the files associated with the site.

Once the pages were created I linked the pages together and linked all additional PDF files, animations and external links.

Implementation of Instructional Guide: Implementation of Model Website

The site was posted to the biomedical communications website to test the site online for any problems. Problems arose when the site was viewed on a Macintosh format. The site was created on a PC format and when moved to a Mac the images began to break up. The files were adjusted in the Macintosh version to make sure that the site ran on both formats. This was important due to the fact that the Laboratory of Molecular Psychiatry is run on Macintosh formatted computers.

When the site was running properly, a link to the test site was sent to News and Publications as well as Dr. Nestler for final approval before the evaluation phase. The site design was approved by News and Publications and following a few minor image adjustments from Dr. Nestler the site was ready for evaluation from members of some of the target audiences. The site was then posted to its permanent online location and is available for viewing at http://www3.utsouthwestern.edu/molpsych/.

CHAPTER FOUR Evaluation

Evaluation of the Instructional Guide and Model Website

In order to evaluate the effectiveness of this project to meet its goals I needed to assess the effectiveness of the Instructional Guide to lead someone through the steps necessary to create a lab website at UT Southwestern. The project needed to be evaluated on multiple levels to see if the project was a success. I created evaluation forms for the Model Website to evaluate the effectiveness of the site to meet the website visitors needs. I created the evaluation forms by following the steps outlined in the evaluation phase of the Instructional Guide. This evaluation, by addressing the major and minor target audiences, will evaluate if the final website has met the initial site goals. The project was also evaluated on whether or not the site runs properly online. I used the feedback collected from online testing and target audience evaluations to assess if the project has met the goals established at the beginning of the project.

Has the project met the initial goals?

The goal of this project was to create an Instructional Guide that laboratories at UT Southwestern can use to create a website for their lab. I was able to create a Model Website for the Laboratory of Molecular Psychiatry following the steps outlined in the Instructional Guide. The ability of the Instructional Guide and Model Website to be used as an example is illustrated in the fact that the Model Website, designed to meet the needs of the Laboratory of Molecular Psychiatry, also serves as a sample site on how to utilize the Instructional Guide in website creation.

Has the project met the goals for the Model Website?

I evaluated three audience groups the effectiveness of the Model websites ability to meet the goals of the Laboratory of Molecular Psychiatry. The three groups were evaluated in order to assess the sites ability to speak to multiple audience levels with its major goal and top priority placed on the recruitment of new students. The surveys were customized for each audience member. Each survey consisted of ten questions that they ranked on a scale of 1 for strongly agree to 5 for strongly disagree. The questions were then followed by a few questions with space available for specific comments and feedback.

Survey Results for the Current Students

The survey aimed at the target audience of potential new students was sent to the twentythree graduate students currently at UT Southwestern. The surveys were designed as a series of ten statements that the respondents could strongly agree, agree, remain neutral, disagree or strongly disagree with. There were a total of five respondents to the current students survey.

For the first statement, the website is well organized, the members of the current student audience responded with two strongly agrees and three agrees.

For the second statement, the website is easy to navigate through, the members of the current student audience responded with one strongly agree and four agrees.

For the third statement, the information presented on this site is complex enough, the members of the current student audience responded with three strongly agrees and two agrees.

For the fourth statement, the website is intuitive to use, the members of the current student audience responded with two strongly agrees and three agrees.

For the fifth statement, this website would attract a potential grad student or post-doc, the members of the current student audience responded with two strongly agrees, two agrees and one neutral.

For the sixth statement, the Basic Introduction covers the basic facts, the members of the current student audience responded with three strongly agrees and two agrees.

For the seventh statement, the Research section is extensive enough, the members of the current student audience responded with two strongly agrees, one agree and two neutrals.

For the eighth statement, the list of resources in the Resources for Students section was extensive enough, the members of the current student audience responded with two strongly agrees, two agrees and one neutral. For the ninth statement, the graphics helped me understand the information presented on this website, the members of the current student audience responded with three strongly agrees and two agrees.

For the tenth statement, this website holds my attention, the members of the current student audience responded with two strongly agrees and three agrees.

In addition to the ten statements the survey included a few questions to ask for any specific additional comments. The comments from the informal survey of current students included: "I think that the site is better than anything that I've ever done but you could always make it flashier by adding animations to the navigation bars, etc. using Flash or whatever."

Another student added "First off, let me say that was AMAZING!!! That was far and away the best lab web page I've ever visited. I felt that the information was presented in a very logical, clear manner. I don't see how that could be improved much. I actually have a warm, fuzzy feeling after looking over that page."

Yet another added, "I particularly like the glossary section and feel that would be a great asset to potential students. A glossary allows much more detail to be presented in the research description. Overall the website was very nice and far surpasses any of the other campus websites I have visited. One suggestion: Contact the Graduate School Program Chairs and suggest that they make similar websites for the graduate programs. Program websites may have as much or more impact on incoming students as individual PI/lab web pages."

Some of the suggestions included, enlarging the font sizes in some of the areas, adding headshots of the lab members to accompany their bio's, an overhead blueprint of the lab, more photos taken in the lab, large images for visitors to use in presentations, more up to date information from the university links,

Survey Results for the Potential Student

In addition to the group of current students a separate survey was sent to a small group of current students and recent graduates of the Georgia Institute of Technology to evaluate the effectiveness of the website. These students were viewed as type and level of possible applicants to graduate institutions such as UT Southwestern. I separated the two student groups in order to assess the levels and responses of current and potential students. The surveys were designed as a series of ten statements that the respondents could strongly agree, agree, remain neutral, disagree or strongly disagree with. There were a total of seven respondents to the potential students survey.

For the first statement, the information presented on this website is clear, the members of the potential students audience responded with five strongly agrees and two agrees.

For the second statement, the information presented on this site is easy to read, the members of the potential students audience responded with three strongly agrees, two agrees and two neutrals.

For the third statement, the information presented on this site is easy to comprehend, the members of the potential students audience responded with two strongly agrees and five agrees.

For the fourth statement, the information presented on this site is complex enough, the members of the potential students audience responded with four strongly agrees and three agrees.

For the fifth statement, the Frequently Asked Questions section is extensive enough, the members of the potential students audience responded with three strongly agrees and four agrees.

For the sixth statement, the Glossary of Terms section is extensive enough, the members of the potential students audience responded with three strongly agrees and four agrees.

For the seventh statement, the website is easy to navigate through, the members of the potential students audience responded with three strongly agrees and four agrees.

For the eighth statement, the list of resources in the other sources of information section is extensive enough, the members of the potential students audience responded with four strongly agrees and three agrees.

For the ninth statement, the graphics helped me understand the information presented on this website, the members of the potential students audience responded with three strongly agrees, three agrees and one neutral.

For the tenth statement, this website holds my attention, the members of the potential students audience responded with two strongly agrees, four agrees and one disagree.

In addition to the ten statements the survey included a few questions to ask for any specific additional comments. As with the group of current students the potential students found the fonts sizes in the submenus and other areas to be a bit small. The comments from the informal survey of potential students included: "Very good site overall, colors are cool, layout is interesting – comes off as professional and thorough but not nearly as boring as a research paper."

Another added, "Overall, the website is impressively designed and presented. The content is thorough as well, and any potential graduate or post-grad student would find it compelling and draw them to seek additional information." Another response stated, "Also consider adding another contact option other than the primary researcher. As a potential student or someone curious about what's going on in the lab I might be willing to e-mail the head honcho but I also might feel he would be slow to respond if at all given his position. An alternate communications source would be good, just make sure whomever it is attentive to the communications."

Some of the suggestions included, moving the page titles to left center instead of right centered, rollovers on menu bar on secondary pages, enlarging some of the images and their labels, a little wordy at times, animations helped, and adding links to lab members CV's.

Survey Results for the General Public

The survey aimed at the general public was administered to several classes at the Art Institute of Dallas. The students were selected to represent the general public due to the fact that they were not necessarily associated with a research institution. There comments were valuable in assessing the level of understanding needed by the general public. The surveys were designed as a series of ten statements that the respondents could strongly agree, agree, remain neutral, disagree or strongly disagree with. There were a total of sixteen respondents to the general public survey.

For the first statement, the information presented on this website is clear, the members of the general public audience responded with one strongly agree, nine agrees, three neutrals and two disagrees. For the second statement, the information presented on this site is easy to read, the members of the general public audience responded with three agrees, two neutrals, ten disagrees and one strongly disagree.

For the third statement, the information presented on this site is easy to comprehend, the members of the general public audience responded with seven agrees, five neutrals, and four disagrees.

For the fourth statement, the information presented on this site is complex enough, the members of the general public audience responded with seven agrees, five neutrals, and four disagrees.

For the fifth statement, the Frequently Asked Questions section is extensive enough, the members of the general public audience responded with four strongly aggress, ten agrees, and two neutrals.

For the sixth statement, the Glossary of Terms section is extensive enough, the members of the general public audience responded with three strongly aggress, nine agrees, one neutral and three disagrees.

For the seventh statement, the website is easy to navigate through, the members of the general public audience responded with three strongly aggress, five agrees, four neutrals, two disagrees and two strongly disagrees.

For the eighth statement, the list of resources in the other sources of information section is extensive enough, the members of the general public audience responded with one strongly agrees, nine agrees and six neutrals.

For the ninth statement, the graphics helped me understand the information presented on this website, the members of the general public audience responded with two strongly agrees, six agrees, six neutrals, one disagree and one strongly disagree.

For the tenth statement, this website holds my attention, the members of the general public audience responded with one strongly agree, four agrees, eight neutrals and three disagrees.

In addition to the ten statements the survey included a few questions to ask for any specific additional comments. Overwhelmingly the group found some of the fonts sizes in the submenus to be a bit small. The comments from the informal survey of the general public included: "I like the overall look of the site, you managed to keep it simple even though the subject matter is very complex."

Some of the suggestions included, adding narration to the animations, linking words in the body text to the glossary, breaking up the body text into smaller chunks, changing the background from white to another color, and adding more images to the glossary section.

CHAPTER FIVE Conclusions and Recommendations

Review Goals

I endeavored to create an audience-specific resource. An Instructional Guide and Model Website that will be available as a resource for other labs at UT Southwestern to use to create websites for their own labs. Following the completion of the Instructional Guide I created a Model Website to illustrate the principles outlined in the Instructional Guide.

Successes

The project had a number of successful features. I was able to create a website, following the steps and guidelines outlined in the Instructional Guide, that met the needs of the sample laboratory. The Laboratory of Molecular Psychiatry's new website meets the needs and goals that they selected for creating a website. The site was also created in a way that will foster effective, efficient updates. As new articles are published they can be added to the pages, new bio's can be added, as well as adding terms to the glossary and the FAQ section.

The Instructional Guide provides a concise, all in one, audience specific resource for the laboratories at UT Southwestern. The Guide provides resources and guidelines necessary for efficient web site creation.

Improvements

As with any project, there is always room for improvement. Problems arise during any project.

The creation of the Model Website utilized the Guide to create one sample site. In order to assess the Guide again another site could be created in order to reassess the usefulness of the Guide. The creation of a new site can test the Guide again for missing features and problems such as language specific jargon.

The resource at the end of the Guide will only stay as current as the resources to which they are linked stay current. For example, if one of the University Resources on housing falls out of date, the Guide will need to be updated to reflect any changes in link addresses, resource changes and updates to University guidelines.

Another improvement could be further research into the capabilities of UT Southwestern sites to fully utilize multimedia features. One problem that arose was the size of some of the animation files only allowed for smaller viewing windows. Research could include the possibilities for streaming video capabilities.

Recommendations

There are a number of recommendations for further study that can continue the work of this project.

Departmental Guide

The guide could be even more audience-specific to particular departments. As stated by one of the current graduate students in the evaluation phase, "One suggestion: Contact the Graduate School Program Chairs and suggest that they make similar websites for the graduate programs. Program websites may have as much or more impact on incoming students as individual PI/lab web pages."

A resource for departmental pages could lead to more effective student recruitment for graduate students as well as medical school students. The surveyed current graduate students at UT Southwestern expressed the desire for a better utilization of web resources.

Institutional Guide

A recommendation for further study could be to research how a University or Institution can make the most effective use of their website. This work could involve researching the website currently in use and how to make improvements based on the current website in use. The research could create an Institutional Guide for departments in the institution to use as a resource.

Instructional Guide for other Communication Tools

Another recommendation for further study would be the study of other communication tools that a laboratory at UT Southwestern might find beneficial for the lab. This research could lead to the creation of Instructional Guides to accompany Model versions of these tools. Examples of these communication tools could include, promotional brochures, power-point presentations, 3D animations, and interactive CD-ROMs.

Presentation Tools Databank

This project could lead to the creation of a departmental databank of resources. The databank could encompass online lab resources and or school resources. The resources available in the databank could be used in the creation of lab or departmental presentations, websites and other communication resources.

Multimedia Instructional Guide

This project could also facilitate the creation of a Multimedia Instructional Guide. The Guide could outline how to effectively utilize multimedia features such as 3D animations on a lab or departmental website.

APPENDIX A GSO SURVEY

- 1) Why did you choose to come to Southwestern? What factors where most important in making this decision?
- 2) Did you visit the UT Southwestern site when you were selecting a grad school? Did the site have any influence on your decision? If so what?
- 3) Did you visit the other schools web sites? Did these schools have any influence on your decision? If so what?
- 4) Did you visit any specific sites on the Southwestern site? If so which ones?
- 5) Did you visit your current labs site? Was there anything on this site that influenced your decision?
- 6) Which features on the lab's site were appealing and/or helpful?
- 7) Which features on the lab's site were unappealing?
- 8) What factors where important in choosing this lab?
- 9) What should be the most important feature of your lab's web site?
 - a. From the point of view of the prospective student
 - b. From your current point of view
- 10) What function should a lab's website have?

Additional Comments:

APPENDIX B NESTLER LAB SURVEY

1) How often do you use the Internet?

What kinds of sites do you most often utilize?

Why do you visit these pages? What do you like about them?

Describe an attractive web page.

What features are appealing? (images, information, design etc)

What is your favorite color?

Name your favorite artist? Why?

What is your favorite art movement (e.g. realism, impressionism, post-impressionism, etc.) Why?

2) Why did you choose UT Southwestern?

What attracted you?

What was your level of understanding of your current lab's research?

Did you visit the schools website and/or the labs website?

Did the Internet play a role in your decision? If so, what role?

Did the schools sites attract you to your program?

Which site features were appealing?

Which features were unappealing?

What features would you have wanted to see that were absent?

3) Which lab do you work in at UTSW?

What is your position?

Why did you choose this lab?

4) Describe your background? Previous schooling? (Undergrad, etc.),

5) What should be the most important feature of your lab's web site? from the point of view of the prospective student from your current point of view

APPENDIX C INSTRUCTIONAL GUIDE COMPLETED WITH NESTLER INFORMATION

How to set up a website for your lab:

A step-by-step guide for laboratories at UT Southwestern Medical Center at Dallas to use for the creation of a website.

Produced by Meredith M. York for the Department of Biomedical Communications ©2004 This document can be printed out and filled out or you may choose to fill it out in a PDF Format.

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1. Introduction:

There are many reasons a laboratory might choose to create a new website or update and outdated site. A lab might want to share the research that they are conducting and their most current results. They might want to attract future students or keep the public informed of the latest medical news.

A website can include basic features and design elements or it can include more complex features such as password-protected areas for intradepartmental communication or possible audio-visual features. The lab will determine the levels of complexity in content and design based on their major target audience and the major goal for the website.

This step-by-step guide is designed for Laboratory's at The University of Texas Southwestern Medical Center at Dallas. The guide will model the necessary steps a Laboratory at UT Southwestern should follow to create or update their lab's website. This process will force the website creator to analyze the mission of the lab and the ultimate mission and direction of the website.

You will answer questions to identify your goals, as well as your target audience or audiences. The information that you collect will allow you to design the structure of the site as well as the content of the site. You must define these features and firmly establish the structure of your site before you will be able to start the graphic design and visual feel of the site.

It is important to remember that a website, like any other published piece, must adhere to publishing guidelines set up by the University as well as United States copyright laws. The guide will outline these regulations and point you towards resources that can help you with the guidelines and regulations.

The steps outlined in this model will guide you through the

- □ Identification of your goals
- □ Identification of your target audience
- □ Mapping out the general structure of your website
- Identification of the content
- Production of the site
- □ Evaluation of the site

2. Analysis:

This phase will guide you through the initial planning for your lab's website. This phase is extremely important to create a useful site. You must define your needs and wants in order to assure that you will meets these goals. During the analysis phase your will identify your goals and audience(s). Only after you have defined your goals and audience(s) will you then be ready to choose the content to meet these goals. This will define the scope and lead to the creation of a site for your laboratory at UT Southwestern.

2.1 Directions:

1- Check if you would like this feature for your lab's website

Х	Feature
	Feature
Х	Feature

2- Rank its priority for your site on a scale of 1-5.

1	2	3	4	5
Lowest priority	Low priority	Moderate priority	High Priority	Highest Priority

Sample Question:

This is a sample question for selecting the goals and audience(s) for your site. The sample person has selected recruitment as one of their goals by placing an x in the box and then ranked recruitment as a high priority for their site. In Contrast, they have also selected that they would like to have information for current students but this is only a moderate priority for their site. You will use this format to answer the questions in the analysis phase of the project.

Wh	at are your goa	ls?	
	0 0 0 0 0 1 2 3 4 5	Х	Recruitment
	00 0 00 12345	Х	Have information for current students
	1 2 3 4 5		Interdepartmental Communications
		X	Intradenatimental Communications

2.2 Define Goals (1) Lowest priority (2) Low priority (3) Moderate priority (4) High Priority (5) Highest Priority

What are your goals?

Rank	put x	
		Deervitment
1 2 3 4 5		Recruitment
		Have information for potential students
1 2 3 4 5		Have information for current students
		Intradepartmental Communications
1 2 3 4 5		Interdepartmental Communications
1 2 3 4 5		Share lab's research
		Inform the general public
1 2 3 4 5		Detailed information about lab
		General information about lab
1 2 3 4 5		Current Projects
1 2 3 4 5		Former Projects
		Job Opportunities
1 2 3 4 5		Clinical Opportunities
		Current Lab Members
1 2 3 4 5		Former Lab Members
1 2 3 4 5		Current Faculty
		Former Faculty
1 2 3 4 5		Recent publications
		Recent Results
1 2 3 4 5		Funding and Support
		Other
1 2 3 4 5		Other
1 2 3 4 5		

2.3 Define Target Audience (1) Lowest priority (2) Low priority (3) Moderate priority (4) High Priority (5) Highest Priority

Who is your target audience(s)?

Rank	put x	
1 2 3 4 5		Potential students
1 2 3 4 5		Current students
1 2 3 4 5		Faculty at UTSouthwestern
1 2 3 4 5		Faculty at other research institutions
1 2 3 4 5		General public
1 2 3 4 5		Potential and Current Investors
1 2 3 4 5		Other
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		

2.4 Define Information for Website

What information do you want on your site?

On the pages 8-14 you will pick what information you would like on your website. You will make these decisions based upon the goals and the target audience(s) you selected on page 5-6. Go to the pages listed below that correspond with your target audience(s) and answer the questions using the same instructions. (*Check if you would like this feature for your lab's website and Rank its priority for your site on a scale of 1-5.*) Be sure to keep in mind the goals you would like this site to meet when you select the information. If you defined a new target audience use the information choices for the following target audiences as a guide to define and prioritize the information on your site.

Potential students	(page 08)
Current students	(page 09)
Faculty at UTSouthwestern	(page 10)
Faculty at other research institutions	(page 11)
General public	(page 12)
Potential and Current Investors	(page 13)
Other Target Audience(s)	(page 14)

(1) Lowest priority (2) Low priority (3) Moderate priority (4) High Priority (5) Highest Priority What information do you want on your site?

(a) For Potential students

Rank	put x	
1 2 3 4 5		Links to information about UTSouthwestern
		FAQ's for potential students
		School Ranking and Reputation
1 2 3 4 5		Current projects
1 2 3 4 5		Former Projects and Results
		Research Descriptions
1 2 3 4 5		Background information on lab members
1 2 3 4 5		Quotes from lab members
1 2 3 4 5		Basic Information about the lab
1 2 3 4 5		Glossary of terms for research audience
		Images
		Recent articles and publications
		Recent books
		Atmosphere in the lab
1 2 3 4 5		Work environment
1 2 3 4 5		Size and resources
1 2 3 4 5		Funding Information
1 2 3 4 5		Department the lab is associated with
1 2 3 4 5		Contact Information
1 2 3 4 5		Links to information about Dallas
1 2 3 4 5		Links to information about living in Dallas
		Housing Information
		Other

(1) Lowest priority (2) Low priority (3) Moderate priority (4) High Priority (5) Highest Priority What information do you want on your site?

(b) For Current students

Links to information about UTSouthwestern
Links to UTSouthwestern Resources
Recent articles and publications
Recent books
Calendar of events in the lab
Annual events
List departmental meetings, journal club, etc
List annual social events
Links to lab resources (images, presentations)
Speaking engagements
Research Descriptions
Current projects
Clinical Opportunities
Images
Reviews of the lab members
Links to relative databases
Work Environment
Information on former lab members
Lab Resources
Educational Aids
Campus maps and resources
Job opportunities
Contact Information
Other

(1) Lowest priority (2) Low priority (3) Moderate priority (4) High Priority (5) Highest Priority What information do you want on your site? (c) For Faculty at UTSouthwestern

Rank	put x	
1 2 3 4 5		Recent articles and publications
1 2 3 4 5		Recent books
		Calendar of events in the lab
1 2 3 4 5		List departmental meetings, journal club, etc
1 2 3 4 5		Research Descriptions
		Current projects
<u>1 2 3 4 5</u>		
1 2 3 4 5		Links to lab resources (images, presentations)
		Speaking engagements
1 2 3 4 5		Images
		Contact Information
1 2 3 4 5		Research tools and resources
1 2 3 4 5		Other
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		

(1) Lowest priority (2) Low priority (3) Moderate priority (4) High Priority (5) Highest Priority What information do you want on your site?

(d) For Faculty at other Research Institutions

Rank	put x	
1 2 3 4 5		Recent articles and publications
1 2 3 4 5		Recent books
1 2 3 4 5		Calendar of events in the lab
1 2 3 4 5		Links to information about UTSouthwestern
1 2 3 4 5		Research Descriptions
1 2 3 4 5		Current projects
1 2 3 4 5		Links to lab resources (images, presentations)
1 2 3 4 5		Speaking engagements
1 2 3 4 5		Images
1 2 3 4 5		Contact Information
1 2 3 4 5		Other
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		

(1) Lowest priority (2) Low priority (3) Moderate priority (4) High Priority (5) Highest Priority What information do you want on your site? (e) For the General Public

Rank	put x	
1 2 3 4 5		Research Descriptions
1 2 3 4 5		Current projects
1 2 3 4 5		Links to information about UTSouthwestern
1 2 3 4 5		FAQ's for the general public
1 2 3 4 5		Background information on lab members
1 2 3 4 5		Glossary of terms for general public
1 2 3 4 5		Recent articles and publications for the general public
1 2 3 4 5		Links to general information about the research
1 2 3 4 5		Links to basic clinical information about the research
1 2 3 4 5		Treatments for medical condition lab is researching
1 2 3 4 5		Basic Information medical condition lab is researching
1 2 3 4 5		Signs and Symptoms of medical condition lab is researching
1 2 3 4 5		Resources for the general public
1 2 3 4 5		Current Findings
1 2 3 4 5		Images
1 2 3 4 5		Contact Information
1 2 3 4 5		Other
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		

(1) Lowest priority (2) Low priority (3) Moderate priority (4) High Priority (5) Highest Priority What information do you want on your site? (f) For Potential Investors

Rank	put x	
1 2 3 4 5		Research Descriptions
1 2 3 4 5		Current projects
		Current projects results
1 2 3 4 5		Recent articles and publications
1 2 3 4 5		
1 2 3 4 5		Recent books
		Images
1 2 3 4 5		Contact Information
1 2 3 4 5		Other
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		
1 2 3 4 5		

(1) Lowest priority (2) Low priority (3) Moderate priority (4) High Priority (5) Highest Priority What information do you want on your site? (g) For Other Target Audience(s)

Rank	put x
1 2 3 4 5	
1 2 3 4 5	
1 2 3 4 5	
1 2 3 4 5	
1 2 3 4 5	
1 2 3 4 5	
1 2 3 4 5	
1 2 3 4 5	
1 2 3 4 5	
1 2 3 4 5	
1 2 3 4 5	
1 2 3 4 5	
1 2 3 4 5	
1 2 3 4 5	
1 2 3 4 5	
1 2 3 4 5	
1 2 3 4 5	
1 2 3 4 5	
1 2 3 4 5	
1 2 3 4 5	
12040	

3. Design:

3.1 Organization of site

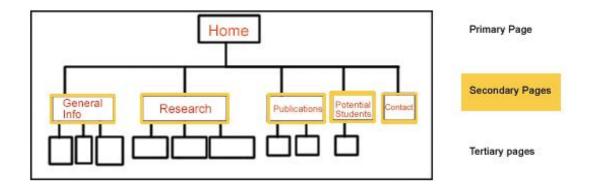
This stage is not to be confused with the graphic design of your website. You will create the visual look for your site during the development stage. This phase will use the information collected in the analysis phase to *design* the structure of your site. It is imperative that you complete the steps in this phase before you even begin to think about the look and feel of your site because you will need to have a map to know where you will go when you reach the graphic design phase. Skipping the structural design will lead to revision problems when you leave out your major goals or forget to address your target audiences costing you extra time, energy and money to create the site you want and need.

Who is your major target audience(s)? (06)	
What is your major goal? (05)	
What is your top priority?	

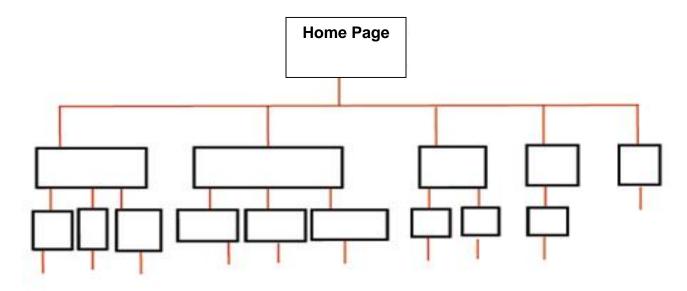
3.2 Review your goals and the priorities you defined in the analysis phase.

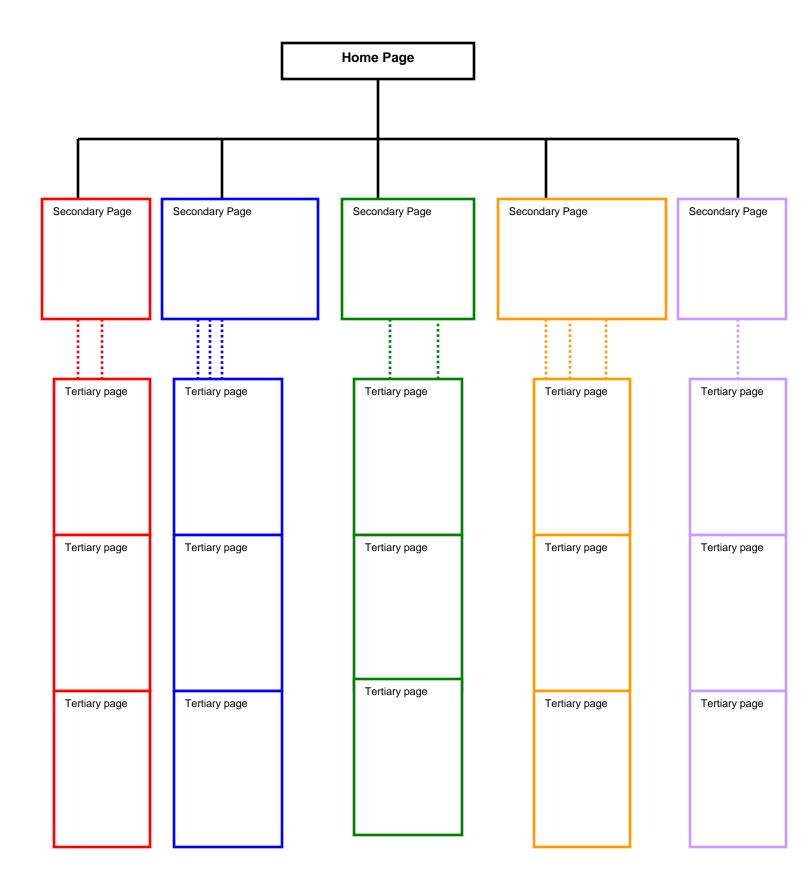
3.3 Design your sites structural framework

You will now setup the structural framework for your website by creating a rough map using the following setup (extras forms are attached on pages 52-54). List secondary pages to branch off of your home page based on your major goals and target audience(s). You may choose to prioritize the pages utilizing different sizes of boxes. Once you have generated this stage of the map, decide which pages you want to branch off of the secondary pages based on the information that you collected on pages 8-14.



This example map shows a site that wants to share information with the potential students, general public and other researchers. Potential students will be able to find useful information via the research page, the publications page as well as the page dedicated to potential students. There will be many opportunities to branch off of these secondary pages. The General Information page is in a larger box than the potential student box, but it is the only area of the site dedicated to members of the general public. The information that could branch off of this page includes, a glossary of terms, a FAQ's section and links to other related pages. Use this example as a guide for mapping out your site in one of the 2 versions provided below.

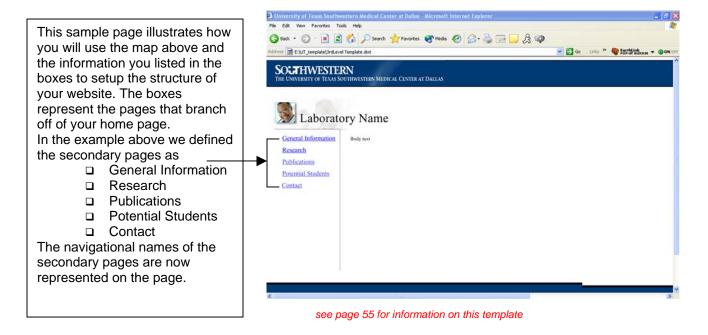




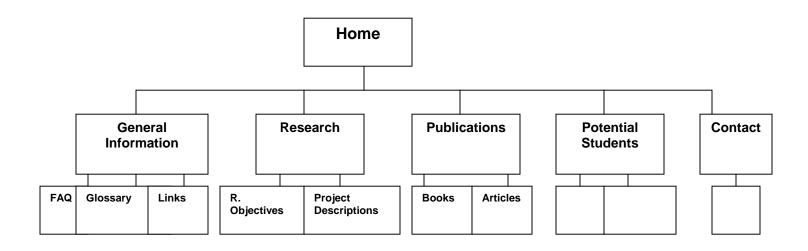
3.4 Define Navigation

The structural map that you have now created will be very important in setting up the structure of the future site. The information that you inserted in each of the boxes will directly correspond to a page on the site. You will also use the pages to show how the architecture of the pages interconnections. For example, you will want all of your pages to link back to the home page.

So to continue with the example from our original map, we want a website that is directed towards the potential students, general public and other researchers. Use this example as a guide for defining your navigational names.



You will use the names you defined in your tertiary boxes to create navigational names for each of the secondary pages. The number of Secondary pages directly corresponds to the number of boxes that you filled in just as the number of tertiary boxes will correspond to the number of boxes filled in on the map. Your map will be customized to your goals and target audiences so there may be more boxes filled in on one section than another depending on your needs.



Sample Navigational Names

- General Information
 - Tertiary page (example: FAQ's)
 - Tertiary page (example: Glossary of terms)
 - Tertiary page (example: links)
- □ Research
 - Tertiary page (example: Research Objectives)
 - Tertiary page (example: Project Description)
 - o Tertiary page
- Publications
 - Tertiary page (example: articles)
 - Tertiary page (example: books)
- Potential Students
 - o Tertiary page
 - o Tertiary page
- Contact
 - o Tertiary page

4. Development:

4.1 Creation and Updates

Who will create your site?	
5	
Who are your content advisors?	
···· ·	
Who will manage and update your site?	
who will manage and apaato your bito.	
How often will you update your site?	
now onen will you update your site:	
1	

***Surveyed graduate students at UT Southwestern overwhelmingly agreed that an out-of-date site that was unappealing. One stated that they would prefer no site at all to an out-of-date site.

4.2 Time Constraints

How much time do you have to create this site?	
Are you on a deadline?	

If you are on a deadline, you may want to use the general templates provided rather than aiming at a more elaborate site

4.3 Technology:

You will be able to choose between a few choices concerning technology. These choices include features such as password-protected areas for intradepartmental communication or possible audio-visual content. However, there are also guidelines set up by UT Southwestern that you will need to follow. For example, if you do not have an account with a server you will need to talk with Internet Services (214-648-6484) to set up an account.

4.4 Southwestern Guidelines

The University of Texas Southwestern Medical Center's guidelines are available online at http://www3.utsouthwestern.edu/topdirect/epub.htm

These guidelines include:

Graphic Standards for Pages Published on the UT Southwestern Website The following graphic standards must be followed for all pages on the UT Southwestern website that are to be viewed primarily by external lay audiences:

Logo bar

All pages must have the UT Southwestern logo bar at the top. This bar will help viewers return to the UT Southwestern home page <u>http://www.utsouthwestern.edu</u>

SOCTHWESTERN THE UNIVERSITY OF TEXAS SOUTHWESTERN MEDICAL CENTER AT DALLAS SOCTHWESTERN THE UNIVERSITY OF TEXAS SOUTHWESTERN MEDICAL CENTER AT DALLAS

Go to http://www3.utsouthwestern.edu/topdirect/topbar.htm to download the logo bar. The logo bar must link back to the UT Southwestern home page http://www.utsouthwestern.edu

Background Color

All pages should have a white background color. This can be specified as the Netscape tag BODY BGCOLOR="ffffff"

Update and Contact Information

All pages must tell who is responsible for maintaining them and the date they were last updated and copyright information. The recommended style for this is as follows: Page maintained by: (your name and e-mail address) Last update: (date) Copyright 2000, The University of Texas Southwestern Medical Center at Dallas if the person who actually maintains and revises the site is not authorized to approve revisions and answer questions regarding the content, please add the statement: "For further information or to request changes to this website, please contact..."

Sample

Page Maintained by: Office of News and Publications (link to site or person) Web page design by Medical Illustration Services Last update: February 2, 2001

Copy Right Policy

The University of Texas System has provided the following regulations and guide lines for the use of copyrighted materials online at <u>http://www.utsystem.edu/ogc/intellectualproperty/copypol.htm</u> these guidelines include the guidelines listed below.

It is the policy of The University of Texas System and its component institutions to follow the United States Copyright Law of 1976, as amended, (Title 17, United States Code, hereinafter, the "Copyright Act"). Accordingly, all faculty, staff and students of The University of Texas System and its component institutions should follow these policy guidelines:

- 1. Only copyrighted materials are subject to the restrictions in this Policy Statement. Uncopyrighted materials may be copied freely and without restriction. Because a copyright notice is not required for copyright protection of works published on or after March 1, 1989, most works (except those authored by the United States Government) should be presumed to be copyright protected, unless further information from the copyright holder or express notice reveals that the copyright holder intends the work to be in the public domain. Works published prior to March 1, 1989, generally require a copyright notice to be protected. The Copyright Office Circular 22 explains how to determine the copyright status of a work.
- 2. Copyrighted software may be copied without the copyright owner's permission only in accordance with the Copyright Act. Section 117 of the Act permits making an archival back-up copy. Most software, however, is licensed to the user and the terms of the license agreement may give the user permission to make copies of the software in excess of the archival copy permitted by the Copyright Act. Each software license agreement is unique. As a result, the user's rights to copy licensed software beyond that permitted under the Copyright Act may only be determined by reading the user's license agreement. Any copying or reproduction of copyrighted software on System or component institution computing equipment must be in accordance with the Copyright Act and the pertinent software license agreement. Further, faculty, staff and students may not use unauthorized copies of software on System or component institution owned computers or networks or computers housed in System or component institution facilities.
- 3. Copyrighted materials may be copied or otherwise used without the copyright owner's permission where such copying constitutes "fair use" under the Copyright Act.
- 4. In order to copy or otherwise use materials, including software, where (a) the materials are copyrighted, (b) use exceeds what is permitted by license or the Rules of Thumb, and (c) the four factor fair use test indicates that the use is likely not fair, permission should be obtained from the copyright owner.
- 5. If permitted by State law and procedures, The University of Texas System will defend any faculty or staff member against a civil action alleging copyright infringement:
 - u where the use is in accordance with the provisions of a valid software license agreement,
 - □ where the use is within the Rules of Thumb,
 - u where the permission of the copyright owner has been obtained, or
 - where the Office of General Counsel has assisted in determining that the use was permissible.

Otherwise, the faculty or staff member will be personally responsible for the defense of a civil action for copyright infringement.

6. Component institutions are responsible for posting notices reflecting this policy at all computer and photocopying stations which may be used for reproducing copyrighted materials, e.g., departmental copy rooms and libraries, and at or near all computer stations. Appendix I provides a suggested form of notice.

Appendix I

Suggested Notice

"Copyright Notice"

"Copying, displaying and distributing copyrighted works, may infringe the owner's copyright. The University of Texas System's policy statement on "Fair Use of Copyrighted Materials" can help you determine whether your use of a copyrighted work is a fair use or requires permission. Any use of computer or duplicating facilities by students, faculty or staff for infringing use of copyrighted works is subject to appropriate disciplinary action as well as those civil remedies and criminal penalties provided by federal law."

Other Policies

The UT Southwestern Handbook of Operating Procedure (January 1998) General Policy, including WWW states:

- Authorship of each page must be indicated on the document.
- Documents that bear the UT Southwestern name should follow the standards set forth in UT Southwestern's *Graphic Standards and Publication Policies*
- Documents may not be used for commercial purposes.
- Documents may not be used solely for personal purposes. Personal use is acceptable only if such use is related to or incidental to the performance of the user's responsibilities and duties to UT Southwestern.
- Documents must adhere to current copyright law, and the user is responsible for getting permission before a copyrighted work is reproduced or used.

Legal Disclaimer

With few exceptions, you are entitled on your request to be informed about the information UT Southwestern collects about you. Under Sections 552.021 and 552.023 of the Texas Government Code, you are entitled to receive and review the information. Under Section 559.004 of the Texas Government Code, you are entitled to have UT Southwestern correct information about you that is held by us and that is incorrect, in accordance with the procedures set forth in The University of Texas System Business Procedures Memorandum 32. The information that UT Southwestern collects will be retained and maintained as required by Texas records retention laws (Section 441.180, et. seq. of the Texas Government Code) and rules. Different types of information are kept for different periods of time.

Link to the legal disclaimer at: http://www8.utsouthwestern.edu/home/disclaimer/index.html

Questions

For any other questions you may visit the Internet Services page online at http://www8.utsouthwestern.edu/utsw/home/internetservices/index.html or call them at 214-648-6484

4.5 Collection of Content

You created a map of the structure of your site in the design phase (page 16-17). You will use this map to choose the content for your website in this phase.

Content includes but is not limited to

- Artwork (illustrations, graphics, photographs, audio/visual elements, animations)
- Links (other sites, articles, books)
- □ Text (body copy, research, FAQ's, quotes)

Images and Information for your site

Do you already have your images?	
If so, do you have the copyright ownership to these images?	
If not, do you have someone to create these images?	
If not, do you know where to go to get rights free images?	
Do you need to contact a medical illustrator?	
Do you have a budget to cover these images?	
Do you know which sites you would like to link to?	
If not, who will gather these links?	
Do you have the text for your site?	
Who will write this text?	

In each of these categories (Artwork, Links, Text) you will need to organize, assemble and edit the content. Resources have been provided on pages 46-55 to help you collect this content. They will direct you to people who can help you with your site's content or direct you to online aids, educational tools and other resources. Remember to base your content based on the major goals and the structural framework you set up and defined on page 16-17.

You will also want to define a content advisor, someone who will review and approve the content to ensure accuracy. Your lab's PI is probably the strongest and best choice for the websites content advisor.

4.6 Naming Mechanisms

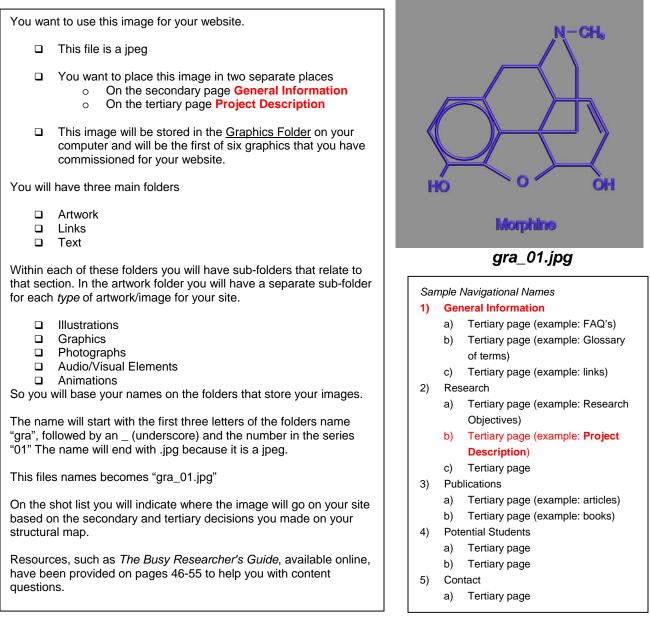
In the development phase you will collect the content for you site so it will be important to setup a file naming system for your content files to help keep your site organized. You will create a file naming system for each of the three categories: Artwork (illustrations, graphics, photographs, audio/visual elements, animations), Links (other sites, articles, books) and Text (body copy, research, FAQ's, quotes).

At this point you have not collected or organized the content for your site, but it will be important to know what to do with the material as you collect it. If you have a naming system in place you will be able to keep your content organized into easily retrievable folders to expedite the production of the site and you will not waste time searching for files.

Artwork

You should label your image files in a consistent manner and keep a *shot list* or list of all of your content (artwork, links, and text) so you will know where to find what you need (any image, article, link, etc) at any time. Whether or not you choose to use this naming convention keep your file names consistent and clear so you will stay organized.

Example:



You will create three *lists* (artwork, links, text) to keep your content information organized. Resources have been provided on pages 46-55 to help you with content questions. When you name the file fill in the information on the lists (*below 28 -35*) to help keep track of the physical location of the artwork on your computer and where the images/files will go on your website.

Artwork List

Sample

	Sumple				
##	File Name	File Folder	Page(s) intended for use on	Туре	Comments
		(location)		of file	
01	gra_01.jpg	Graphics	General information	jpeg	Diagram of the
			Research-Project Description		drug morphine

##	File Name	File Folder (location)	Page(s) intended for use on	Type of file	Comments

	[[]
			1	

Links

The links you may choose for your site could include links to other sites and pages within the larger UT Southwestern website, as well as external links to websites such as the CDC. You will probably want to use the given name for external and departmental links since you will not need to store "files" for external links since they only need the web address to link to these pages.

You may also choose to have certain pages link to files such as a PDF of an article. In this case you will need to store these files in a folder (articles, books, etc). Follow the naming convention described for artwork. The name will start with the first three letters of the folders name "art", followed by an _ (underscore) and the number in the series "01" The name will end with the file extension such as .pdf.

Label your files in a consistent manner and keep a *link list* or list of all of your links so you will know where to find the links and files you need at any time.

When you name the file fill in the information on the link list (*below*) to help keep track of the physical location of the files on your computer and where the files will go on your website.

You will have a separate sub-folder for each type of artwork/image for your site.

- External Links
- □ Articles
- Books

Resources, such as *The Busy Researcher's Guide*, available online, have been provided on pages 46-55 to help you with content questions.

	San	nple				
	##	File Name	File Folder (location)	Page(s) intended for use on	Type of file	Comments
File	01	art_01.pdf	Articles	Publications -Articles	PDF	Article in
						Cell
External link	02	Texas Online	http://www.texas.gov/	Potential Students - Texas	WEB	Regional
						Info

Link List

##	File Name	File Folder (location)	Page(s) intended for use on	Type of file	Comments

L	1	I	1	L

Text

The text for your site will mostly take the form of HTML text that you will place in your pages, refer to the manual that came with your web-building program (ex. Dreamweaver) for instructions on placing text. However sometimes you may choose to save text, such as a quote, as a graphic, so continue to use the naming convention for your text files. *The name will start with the first three letters of the folders name "bod", followed by an* (*underscore*) *and the number in the series "01" The name will end with the file extension such as .doc.* Remember to keep your folder names unique so that you do not mix up the folders. (ex. You could confuse the research sub-folder for artwork with the research sub-folder for text if these were not in the right folder).

You should label your image files in a consistent manner and keep a *text list* or list of all of your text so you will know where to find it at any time.

When you name the file fill in the information on the shot list (*below*) to help keep track of the physical location of the artwork on your computer and where the images/files will go on your website.

You will have a separate sub-folder for each type of artwork/image for your site.

- Body Copy
- Text Research
- □ FAQ's
- Quotes

Resources, such as *The Busy Researcher's Guide*, available online, have been provided on pages 46-55 to help you with content questions.

~			
Sa	m	n	0
Ja	,,,,	DI	C

##	File Name	File Folder	Page(s) intended for	Туре	Comments
		(location)	use on	of file	
01	bod_01.doc	Body Copy	General Information	DOC	introduction

Text List

##	File Name	File Folder (location)	Page(s) intended for use on	Type of file	Comments

L	1	I	1	L

4.7 Helpful Hints

How to link to a file

If you would like to link to a file, for example, a PDF file make the link on your site to the actual file.

How to play a movie on your site

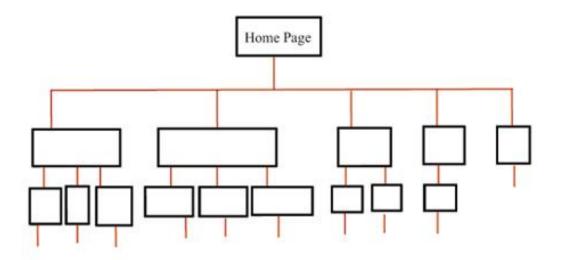
If you would like to have a movie or animation play on your site, you can embed the file into a web page or have a new window open. See your web editing software's manual for detailed instructions on how to troubleshoot similar problems.

University Resources

The University has a UT Databank through the UT Internet Content Applications. You can use this bank of approved images for your website. Contact Internet Services to find out how to access these files. You can contact them online at http://www8.utsouthwestern.edu/utsw/home/internetservices/index.html or call them at 214-648-6484

4.8 Organize, assemble and edit

You will again refer back to the structural map that you filled out on page 16-17. As you gather the content fill in your artwork, link and text lists on pages 27-34 to aid in the organization of the content. Remember to stick to the naming conventions defined on pages 26-27. Content resources are available on pages 46-55.



List the information needed to meet your goals. Sample: Description of Current Research Projects suitable for the General Public		
	needed to meet your	Sample: Description of Current Research Projects suitable for the General Public
	gouior	

Collect or commission the images to go on the website.	Sample: Image of the structure of the Drug Morphine gra_01.jpg — shot list image #1

List the articles/books to link to on the website.	Sample: list all of the information about the article so you can copy and paste on the future site
min to on the website.	Nestler, E.J. and Aghajanian, G.K. (1997) Molecular and cellular basis of addiction. Science <u>278</u> :58-63.

Determine links to other institutional pages or external links.	Sample: list all of the information about the external and institutional links so you can copy and paste on the future site Centers for Disease Control: <u>http://www.cdc.gov/</u>

List areas of the site that you need text for.	Sample: A Introduction that will state the mission of the lab bod_01.doc Text List #15

4.9 Graphic Design

Once you have finished your structural site design and you have collected all of the content for your site you can begin to *design* the look and feel of the website as well as the overall graphic design and page design. Your home page should be similar to what you might see on the cover of a magazine. The image should relate to your research and draw in your major target audience(s). The secondary pages should relate to the home page in the look and feel but allow the content to be the most important feature.

Review Graphic Design Principles

Once you have defined your goals and collected the content for your site review *The Busy Researcher's Guide*, available online at

http://edissertations.library.swmed.edu/pdf/WilkinsM052903/design_guide/index.html

This project was created to educate researchers on the basic graphic design principles needed for web design.

4.10 Creation of Site

You may either choose to setup your site based on the general templates provided or use these templates as a guide to build upon in the creation of your new site. UT Southwestern Internet Services has provided a template as a solution to your website needs that you may choose to utilize. If you choose to elaborate on the templates be sure to review the graphic design principles above and the resources provided on pages 46-55. Make sure you are following the UTSouthwestern guidelines on pages 21-25.

There are a number of programs that you can use to design and create your website. These programs include, but are not limited to Fireworks, Dreamweaver and GoLive. You can contact Internet Services with questions about the best programs to use at

http://www8.utsouthwestern.edu/utsw/home/internetservices/index.html or call them at 214-648-6484.

Once you have completed the graphic design and collected all of you content you can combine and fill in the content to complete the sites look. When the pages are complete you link them together and test the site. Once you have tested the website you should submit the site to news and publications for approval. http://irweb.swmed.edu/newspub/newsread.asp

If you already have an account with a server you can post your site and test it without making it active on the web. If you do not have an account with a server you will need to talk with Internet Services.

For any other questions you may visit the Internet Services page online at http://www8.utsouthwestern.edu/utsw/home/internetservices/index.html or call them at 214-648-6484

5. Implementation:

During development phase you or the sites creator designed and constructed the web pages for your website. Following the collection of content, it was inserted into the pages and the pages were linked together and the website was tested. Up until this point your site has been active to allow you to test it but it has not been open for online Internet viewing. Your site needs to be active so that when you submit it for approval the UT Southwestern Office of News and Publications can view the site online, as it will appear to future site visitors.

Following the approval of the UT Southwestern Office of News and Publications your site will be ready to post to the World Wide Web and you will be able to make your site available for online Internet viewing on and off campus. You can contact the office via email at <u>news@utsouthwestern.edu</u> or you can call the assistant director of the Office of News and Publications at 214-648-3404.

6. Evaluation:

You must now evaluate:

- Does your site work
- Are there any Technical Problems
- □ Have you met your ultimate goals for creating a website
- □ Have you addressed your Target Audiences needs

6.1 Does your site work

You need to evaluate whether or not your site is working correctly.

- □ Is the site set up based on your structural map?
- □ Are all of the pages linked together?
- □ Can you get to all of the pages?
- Do the external links work?
- □ Are the images loading in a timely fashion?

6.2 Are there any Technical Problems

If you are having problems with your site, you may need to check the manual that came with your webediting program to trouble shoot. For example, if the images are taking to long to load you will need to check the resolution of the images. Images with a high resolution can take a long time to load if the user is on a dial up connection.

6.3 Have you met your ultimate goals for creating a website

Earlier in the process you answered these questions, answer the questions again to help you evaluate if you have met your ultimate goals. See the design section on page 15 to review your stated major goals.

Who is your major target audience(s)? (15)	

What is your major goal? (15)	
what is your major goar: (15)	
What is your top priority? (15)	
milar is your top priority . (10)	

- Does your site meet your goals?
- Does your site address your major target audience(s)?
- □ Have you met your top priority?

6.4 Have you addressed your Target Audiences needs

You should show the site to at least one representative from each of your major target audience(s). Have these representatives evaluate your site to aid you in determining if the site is useful to them.

- □ Ask for feedback
- □ Inquire from someone in each target group

Sample Evaluation for Target Audience(s) Representative

Potential Students

- □ Was this site helpful?
- □ Which features were helpful/useful?
- What would you have wanted to know that wasn't available?
- □ Would this website have any influence on your decision to choose UT Southwestern?
- □ Would this website have any influence on your decision to choose this laboratory?
- □ Is this an attractive website?

General Public

- □ Was this site helpful?
- □ Which features were helpful/useful?
- What would you have wanted to know that wasn't available?
- □ Is this an attractive website?

7. Resources:

7.1 Artwork:

Where to go to commission images or find someone to create images

- Biomedical Art Services
 Donald Riley Supervisor 214-648-9755
 http://www.swmed.edu/home_pages/mis/default.html
- Biomedical Communications Graduate Program
 Lewis E. Calver- Director (214) 648-4699
 http://www8.utsouthwestern.edu/utsw/home/gradschool/biocommunications/index.html

Do you have the copyright ownership to your images?

- U.S. Copyright Office <u>http://www.copyright.gov/</u>
- UT Use of Copyright Materials <u>http://www.utsystem.edu/ogc/intellectualproperty/copypol.htm</u>
- UT System Crash Course in Copyright http://www.utsystem.edu/ogc/intellectualproperty/cprtindx.htm

Where to go to get rights free images

- Public Domain Images <u>http://mciunix.mciu.k12.pa.us/~spjvweb/cfimages.html</u>
- Public Health Image Gallery (CDC) <u>http://phil.cdc.gov/Phil/default.asp</u>

You can also use a search engine such as <u>www.google.com</u> for images that may or may not be rights free. An example might be to search for "rights free images." You can also search for a specific company such as "Getty Images" for photographs and illustrations or "Indexed Visuals" for medical illustrations.

7.2 Links:

Website Design Links:

- The Busy Researcher's Guide <u>http://edissertations.library.swmed.edu/pdf/WilkinsM052903/design_guide/index.html</u>
- Internet Services <u>http://www8.utsouthwestern.edu/utsw/home/internetservices/index.html</u>
- News and Publications
 <u>http://irweb.swmed.edu/newspub/newsread.asp</u>
- Graphics Standards Manual: <u>http://www8.utsouthwestern.edu/utsw/cda/dept37389/files/173479.html</u>
- University of Texas: Web Resources http://www.cs.utexas.edu/users/ethics/Other/links.html

UT Southwestern Links:

- Administrative Departments
 <u>http://www8.utsouthwestern.edu/home/facultyadministration/admindept/index.html</u>
- Admissions Information <u>http://www8.utsouthwestern.edu/utsw/cda/dept21170/files/82766.html</u>
- Alumni Affairs <u>http://www8.utsouthwestern.edu/utsw/cda/dept21349/files/36201.html</u>
- Campus Housing: <u>http://www8.utsouthwestern.edu/utsw/home/facultyadministration/auxiliaryservices/campushousin</u> g/index.html
- Campus Overview Map: <u>http://www8.utsouthwestern.edu/utsw/cda/dept23450/files/28496.html</u>
- City of Dallas
 http://204.66.40.189/
- Dallas Metroplex Links: <u>http://www.utsouthwestern.edu/utsw/cda/dept27747/files/162482.html</u>
- Dining in Dallas
 <u>http://www8.utsouthwestern.edu/utsw/cda/dept26491/files/97945.html</u>
- Faculty Directory <u>http://www8.utsouthwestern.edu/findfac</u>
- Financial Aid <u>http://www8.utsouthwestern.edu/utsw/home/financialaid/index.html</u>

- Getting Around in Dallas <u>http://www8.utsouthwestern.edu/utsw/cda/dept26491/files/94113.html</u>
- Graduate School Admissions Information: <u>http://www8.utsouthwestern.edu/utsw/cda/dept21170/files/35302.html</u>
- Graduate School Catalog: <u>http://www.swmed.edu/home_pages/publish/sgs_catalog/SGScatalog.html</u>
- Health Services <u>http://www8.utsouthwestern.edu/utsw/cda/dept26491/files/95259.html</u>
- International Office Home Page <u>http://www8.utsouthwestern.edu/utsw/home/intaff/index.html</u>
- Legal Disclaimer <u>http://www8.utsouthwestern.edu/home/disclaimer/index.html</u>
- □ Library: <u>http://www8.utsouthwestern.edu/utsw/home/facultyadministration/library/index.html</u>
- Living in Dallas Frequent UTSW and Community Resources <u>http://www8.utsouthwestern.edu/utsw/cda/dept26491/files/97873.html</u>
- Living in Dallas: Renting an apartment or home: <u>http://www.utsouthwestern.edu/utsw/cda/dept26491/files/95225.html</u>
- Maps and Directions --- Dallas Vicinity Map <u>http://www8.utsouthwestern.edu/utsw/cda/dept23439/files/24888.html</u>
- Medical Scientist Training Program <u>http://www8.utsouthwestern.edu/utsw/cda/dept21839/files/21914.html</u>
- Online Applications for Admissions: <u>http://www.utsouthwestern.edu/utsw/cda/dept21170/files/171811.html</u>
- Parking Services
 <u>http://www8.utsouthwestern.edu/utsw/home/facultyadministration/auxiliaryservices/parking/index.</u>
 <u>html</u>
- Programs Directory <u>http://www8.utsouthwestern.edu/home/education/programdirectory/index.html</u>
- Shuttle Bus Service: <u>http://www.utsouthwestern.edu/utsw/home/admin/shuttle/index.html</u>
- Student Center: <u>http://www4.utsouthwestern.edu/studentcenter//homepage.asp</u>
- Texas Online http://www.texas.gov/
- UT Southwestern Negotiated Hotels <u>http://www3.utsouthwestern.edu/materialsmanagement/hotel.htm</u>

- UT Southwestern Programs of Study: <u>http://www8.utsouthwestern.edu/utsw/cda/dept21170/files/35677.html</u>
- Weather in Dallas <u>http://www8.utsouthwestern.edu/utsw/cda/dept26491/files/97958.html</u>

Science Links:

- Centers for Disease Control: <u>http://www.cdc.gov/</u>
- National Institutes of Health: <u>http://www.nih.gov/</u>
- National Library of Medicine <u>http://www.nlm.nih.gov/</u>
- Medline/Pub Med <u>http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?holding=utswmlib</u>
- Texas Department of Health <u>http://www.tdh.state.tx.us/tcid/</u>

Journal Links:

Consult the Library Site to find current journal subscriptions at UT Southwestern.

Library: <u>http://www8.utsouthwestern.edu/utsw/home/facultyadministration/library/index.html</u>

General Public Links

- Centers for Disease Control: <u>http://www.cdc.gov/</u>
- Discovery <u>http://www.discovery.com/</u>
- Health Finder
 <u>http://www.healthfinder.gov/</u>
- National Institutes of Health: <u>http://www.nih.gov/</u>
- National Library of Medicine <u>http://www.nlm.nih.gov/</u>
- National Library of Medicine For the Public <u>http://www.nlm.nih.gov/portals/public.html</u>
- Scientific American <u>http://www.sciam.com/</u>

- Texas Department of Health <u>http://www.tdh.state.tx.us/tcid/</u>
- Web MD <u>http://www.webmd.com/</u>

Departmental Links

The following links are example departmental links. A lab might choose to use links that are related to the department that they are associated with at the university or the area of science that they are currently studying. These links might aid in further study of the science related to their research.

Example: Psychiatry Links:

- American Psychological Association: <u>http://www.apa.org/</u>
- Department of Psychiatry: Basic Research Laboratories <u>http://www.utsouthwestern.edu/utsw/cda/dept28691/files/59202.html/</u>
- National Institute on Alcohol Abuse and Alcoholism <u>http://www.niaaa.nih.gov/</u>
- National Institute on Drug Abuse: <u>http://www.nida.nih.gov/</u>
- National Institute of Mental Health: <u>http://www.nimh.nih.gov/</u>
- The National Mental Health Association: <u>http://www.nmha.org/</u>

7.3 Text:

Writing Aids

- 11 Rules of Writing <u>http://www.junketstudies.com/rulesofw/</u>
- American Psychological Association <u>http://www.apa.org</u>
- Common Errors in English <u>http://www.wsu.edu/~brians/errors/</u>
- Guide to Grammar and Writing <u>http://webster.commnet.edu/grammar/index.htm</u>
- Ohio State University: Writing for the Web http://wdvl.com/Internet/Writing/
- University of Richmond Writing Center <u>http://writing.richmond.edu/writersweb/</u>
- UT Southwestern Internet Service Writing Tips <u>http://www.utsouthwestern.edu/utsw/cda/dept96265/files/110903.html</u>
- Webster's Dictionary Online <u>http://www.m-w.com/dictionary.htm</u>
- WDVL: Writing for the Web <u>http://wdvl.com/Internet/Writing/</u>
- Writing Den <u>http://www2.actden.com/writ_den/</u>
- Writing for the Web
 <u>http://www.useit.com/alertbox/9703b.html</u>

Books

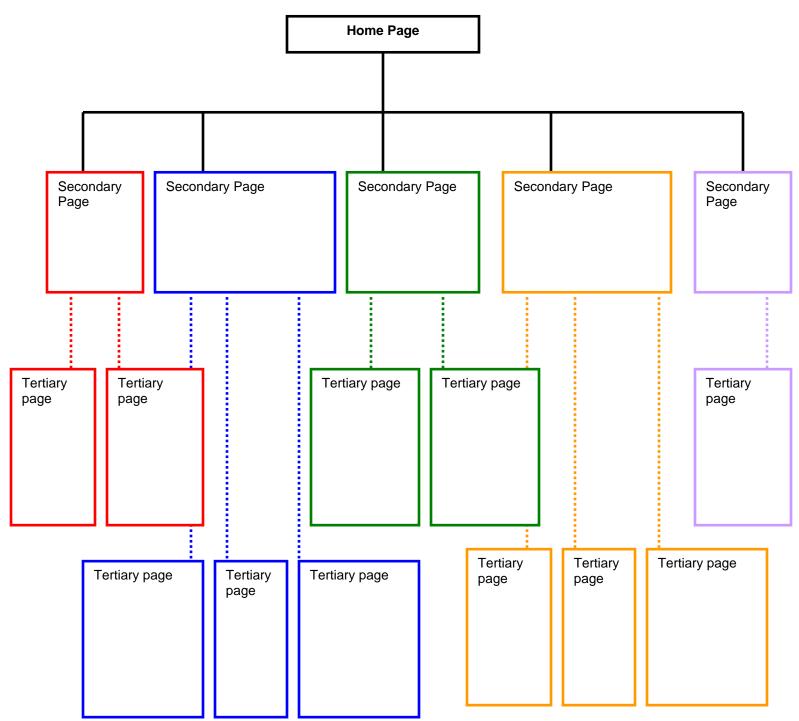
- Strunk, William Jr. and White, E.B., (2000). *The Elements of Style* (fourth ed.). Needlham Height, Massachusetts: Longman Publishers.
- Goldstein, Norman. (2004). The Associated Press Stylebook and Briefing on Media Law. New York: Basic Books.

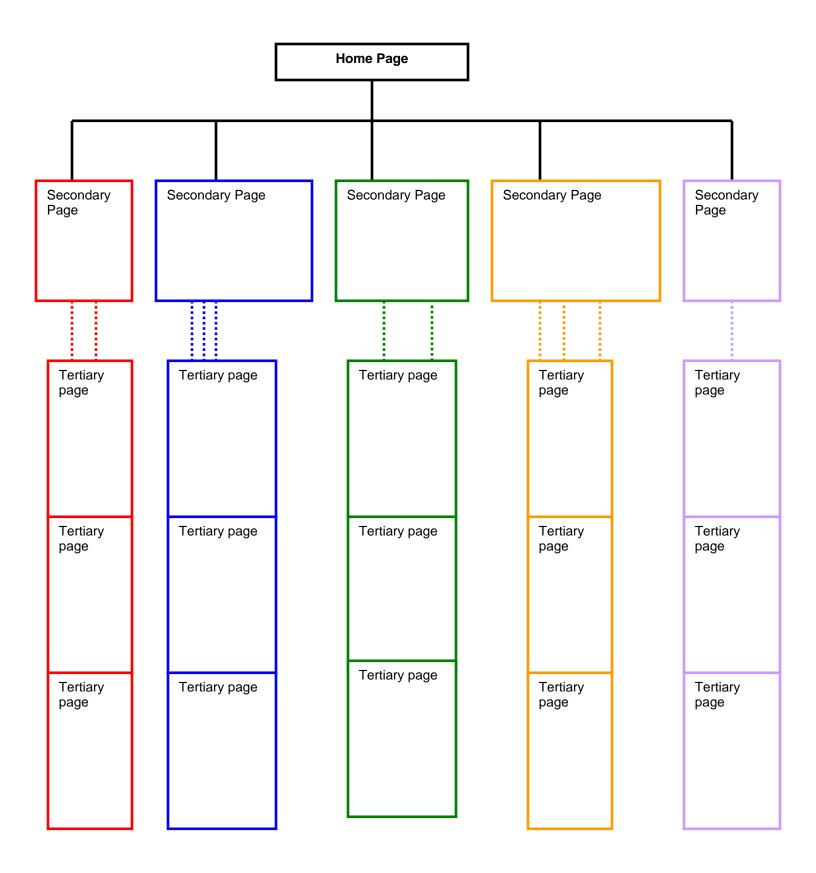
English Aids:

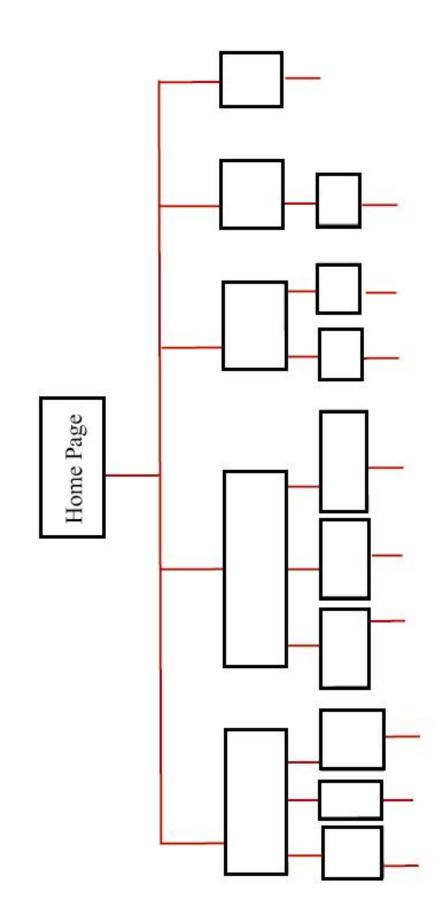
- English Grammar Links for ESL Students <u>http://userpages.umbc.edu/~kpokoy1/grammar1.htm</u>
- English as a Second Language Site <u>http://www.rong-chang.com/</u>

7.4 Structural Template

3 Versions are provided below







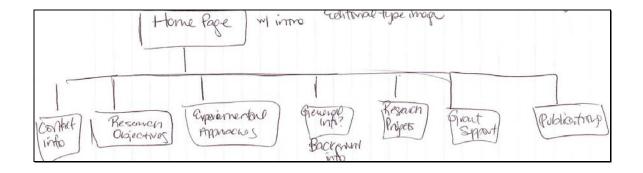
7.5 Website Templates

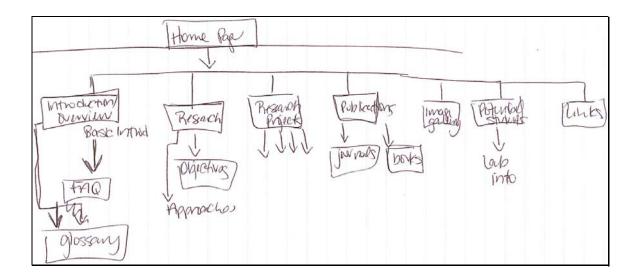
The University provides template files for labs to use to create a website. Contact Internet Services to find out how to access these files. You can contact them online at

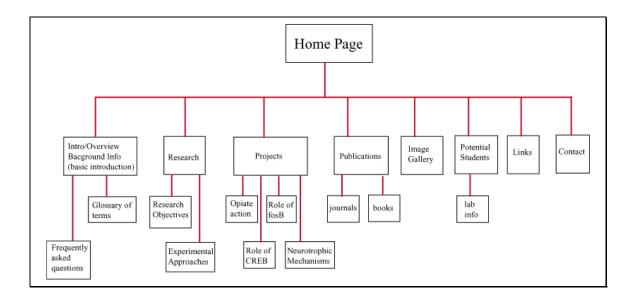
http://www8.utsouthwestern.edu/utsw/home/internetservices/index.html or call them at 214-648-6484

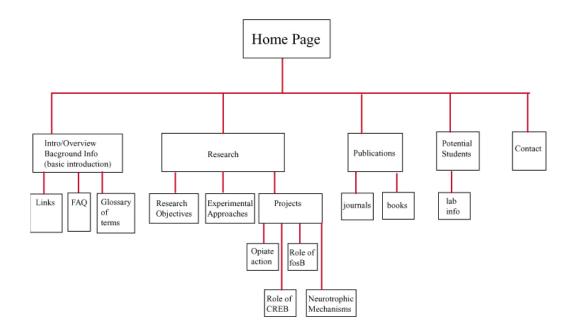
You may also choose to vary these files to create a unique website. Any variations on the templates should remain within the guidelines set forth by the University (21-25).

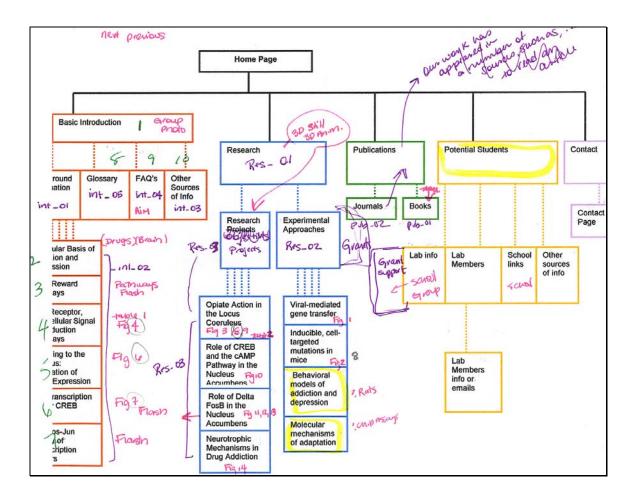
APPENDIX D STRUCTURAL CHARTS FOR NESTLER LAB

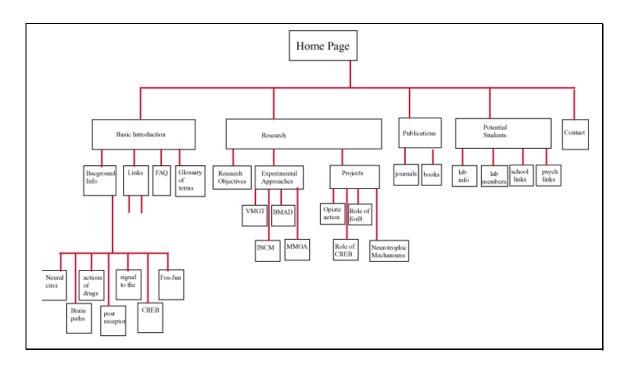


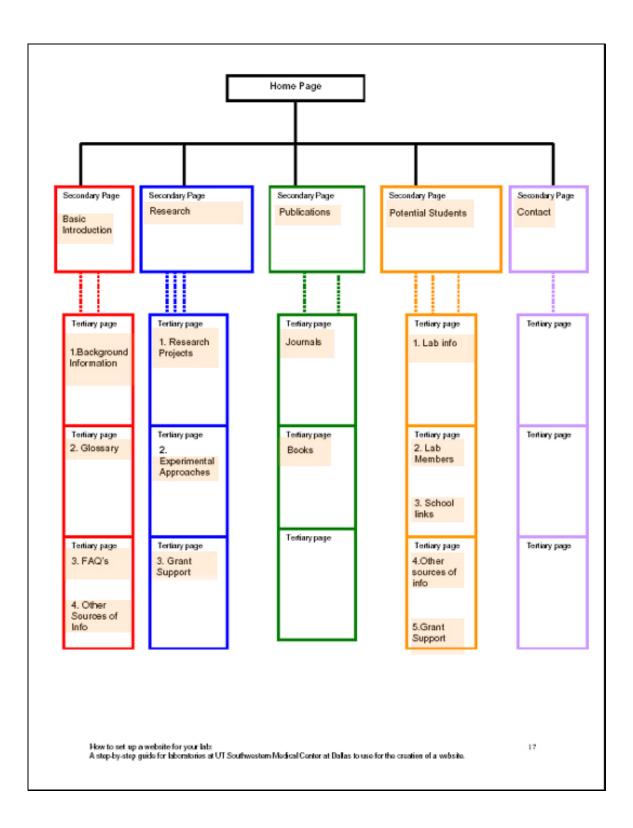












APPENDIX E EVALUATION FOR THE GENERAL PUBLIC

Laboratory of Molecular Psychiatry Website Survey

Directions: Please visit the website temporarily located online at http://www.swmed.edu/medillus/nestler_lab

after you have reviewed the site please answer the following questions by

- (a) Placing an X in the box directly below your choice
- (b) Answering the additional questions with your comments

Example: *The information presented on this website was clear.* If you thought the information on the site was unclear you would place an X in the box below choice # 4

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
			Х	

1 - The information presented on this website is clear.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

2 - The information presented on this site is easy to read.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

3 - The information presented on this site is easy to comprehend.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

4 – The information presented on this site is complex enough.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

5 - The Frequently Asked Questions section is extensive enough.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

6 - The Glossary of Terms section is extensive enough.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

7 - This website is easy to navigate through.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

8 - The list of resources in the Other Sources of Information section is extensive enough.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

9 - The graphics helped me understand the information presented on this website.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

10 - This website holds my attention.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

11- Do you have any suggestions that would

- (a) Make the information presented on this web site clearer?
- (b) Make this web site easier to navigate through?
- (c) Make this web site better hold your attention?

12- Do you have any suggestions on

- (a) What type of graphics you would like to see this web site
- (b) Which questions would you have added to the FAQ's section on this web site
- (c) Which terms would you have added to the Glossary section on this web site
- (d) Which resources would you have added to the Other Sources of Information section on this web site

13- Additional Comments

APPENDIX F EVALUATION FOR CURRENT STUDENTS

Laboratory of Molecular Psychiatry Website Survey

Directions: Please visit the website temporarily located online at http://www.swmed.edu/medillus/nestler_lab

after you have reviewed the site please answer the following questions by

- (a) Placing an X in the box directly below your choice
- (b) Answering the additional questions with your comments

Example: *The information presented on this website was clear.* If you thought the information on the site was unclear you would place an X in the box below choice # 4

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
			Х	

1 – This website is well organized.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

2 - This website is easy to navigate through.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

3 - The information presented on this site is complex enough.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

4 – This web site is intuitive to use.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

5 – This web site would attract a potential grad-student or post-doc.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

6 - The Basic Introduction section covers the basic facts.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

7 - The Research section was extensive enough

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

8 - The list of resources in the Resources for Students section was extensive enough.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

9 – The graphics helped me understand the information presented on this website.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

10 - This website holds my attention.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

11- Do you have any suggestions that would

- (a) Make the information presented on this web site clearer?
- (b) Make this web site easier to navigate through?
- (c) Make this web site better hold your attention?

12- Do you have any suggestions on

- (a) What type of graphics you would like to see this web site
- (b) What would you like to see added to the Research section this web site
- (c) Which resources would you have added to the Resources for Students section on this web site

13- Additional Comments

APPENDIX G EVALUATION FOR POTENTIAL STUDENTS

Laboratory of Molecular Psychiatry Website Survey

Directions: Please visit the website temporarily located online at http://www.swmed.edu/medillus/nestler_lab

after you have reviewed the site please answer the following questions by

- (a) Placing an X in the box directly below your choice
- (b) Answering the additional questions with your comments

Example: *The information presented on this website was clear.* If you thought the information on the site was unclear you would place an X in the box below choice # 4

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
			Х	

1 - The information presented on this website is clear.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

2 - The information presented on this site is easy to read.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

3 - The information presented on this site is easy to comprehend.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

4 – The information presented on this site is complex enough.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

5 - The Frequently Asked Questions section is extensive enough.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

6 - The Glossary of Terms section is extensive enough.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

7 - This website is easy to navigate through.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

8 - The list of resources in the Other Sources of Information section is extensive enough.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

9 - The graphics helped me understand the information presented on this website.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

10 - This website holds my attention.

1	2	3	4	5
Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

11- Do you have any suggestions that would

- (a) Make the information presented on this web site clearer?
- (b) Make this web site easier to navigate through?
- (c) Make this web site better hold your attention?

12- Do you have any suggestions on

- (a) What type of graphics you would like to see this web site
- (b) Which questions would you have added to the FAQ's section on this web site
- (c) Which terms would you have added to the Glossary section on this web site
- (d) Which resources would you have added to the Other Sources of Information section on this web site

13- Additional Comments

APPENDIX H LINK TO INSTRUCTIONAL GUIDE

The Instructional Guide is attached as an accessory PDF file. To open this document, the

PDF file Instructional_guide.pdf is located within the folder that is name "Instructional".

APPENDIX I UPDATE DIRECTIONS FOR NESTLER LAB

Update Directions for the Nestler Website

This document outlines how the site was constructed, the location of the files needed to create the website, the fonts used and the specifications for updating the site.

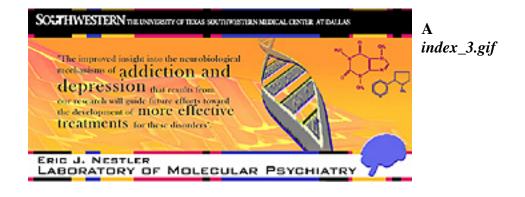
Creation Process for Current Pages

The programs Adobe Photoshop and Macromedia Dreamweaver were used to create the web site

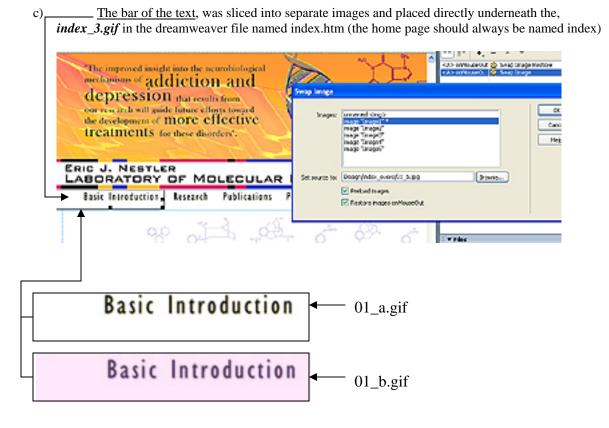
All of the images were initial created as .jpg files and then saved for the web as .gif files to lower the file size and optimize space

1) Home Page

- a) The original image for the home page was flattened in Photoshop to one layer
- b) The background image file *index_backg_3.gif* was set to the top left once with no repeat
 - 1- The background image was created by dividing the flattened image into three parts to create
 - a. The background image, *index_backg_3.gif*,
 - b. The image that was placed on top of it in dreamweaver, *index_3.gif*
 - c. A bar of the text to use to create rollovers

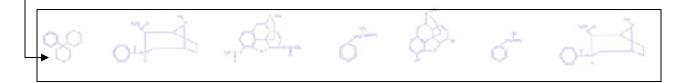






- d) In the behaviors menu a swap image restore behavior was added to each image to create rollovers
 - A Hotspot was placed over the UT Southwestern logo and then given a behavior to open a new window that links to the UT Southwestern home page (This adheres to one of the guidelines set forth by the university)
 - 2- Hotspots were then placed over each term in the sliced up text bar, *Basic Introduction* 01_a.gif, *Research* 02_a.gif, *Publications* 03_a.gif, *Potential Students* 04_a.gif and Contact 05_a.gif), and then in the behaviors were added to link these hotspots to their corresponding pages

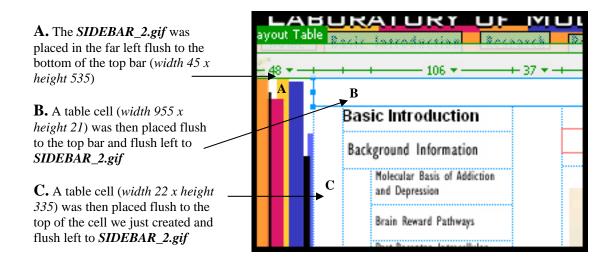
Drugs.gif e) The image of the chemical structure of drugs, Drugs.gif, was added directly underneath the rollover



2) Secondary pages

- a) The background image file *background_b.gif* was set to the top left once with no repeat
- b) The top bar was then placed in the top left over the background image, the background file will continue on to fill the top right
 - 1- A Hotspot was placed over the UT Southwestern logo and then given a behavior to open a new window that links to the UT Southwestern home page (This adheres to one of the guidelines set forth by the university)
 - 2- Hotspots were then placed over each term in the top bar, *Basic Introduction, Research, Publications, Potential Students and Contact)*, and then in the behaviors were added to link these hotspots to their corresponding pages

c) Directly underneath the top bar the page was sliced into table cells to hold the content for each page

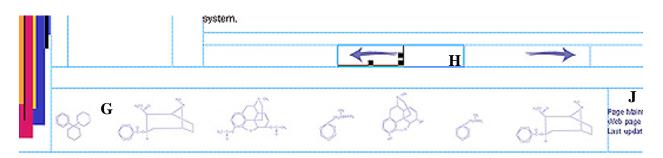


- d. Within this opened area the Headline for each secondary page was added (*Basic Introduction*) was typed in a table cell (*width 127 x height 19*)
- e. The sliced top versions of the side text are then added in table cell boxes that fit their actual sizes
 - i. All images are flush right to the Headline box for each page
 - ii. White jpg. Images were added in the empty cells post production to keep all of the cells from collapsing in the Macintosh format
- f. In the behaviors menu a swap image restore behavior was applied to the top version of each text box so that the rollover images will appear

Swap Image			
imagi imagi imagi unna imagi unna Set source to: Desig V Pri	e "Image3" e "Image2" e "Image1" e "Image7" amed e "Image6" amed gn/buttons/left_ob.jpg reload images estore images onMouseOut	Cancel Help	rsign ode oplication ag utes Behaviors R +, - A nMouseOut & Swap

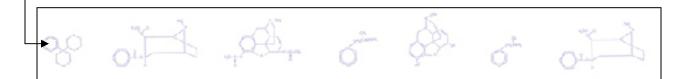
- g. You will add the image of the chemical structure of drugs, *Drugs.gif*, flush left to *SIDEBAR_2.gif* at the bottom of the table
- h. The arrows that point to the next and previous pages are placed at the bottom of the table cell that holds the body copy for each page. (*Flatted versions of the right and left arrows are in the buttons folder*)

i. In the behaviors menu a swap image restore behavior was applied to the top version of each arrow box so that the rollover images will appear as step f outlined



j. The Update Text is added flush left to the image of the chemical structure of drugs, Drugs.gif

Drugs.gif



3) Other Important Resources

The glossary and FAQ's sections of the basic introduction pages were created by copying and pasting the information from the word document directly into the html text format. Anchors were added to the pages so the top corresponding alphabet letters and/or question numbers could link to their appropriate destinations.

The pages have a link to a printer friendly version. This document was created by converting the word document into a PDF and then linking the html text directly to the file. This form of linking the text to the file is the same way that the animations were linked to html text or an image.

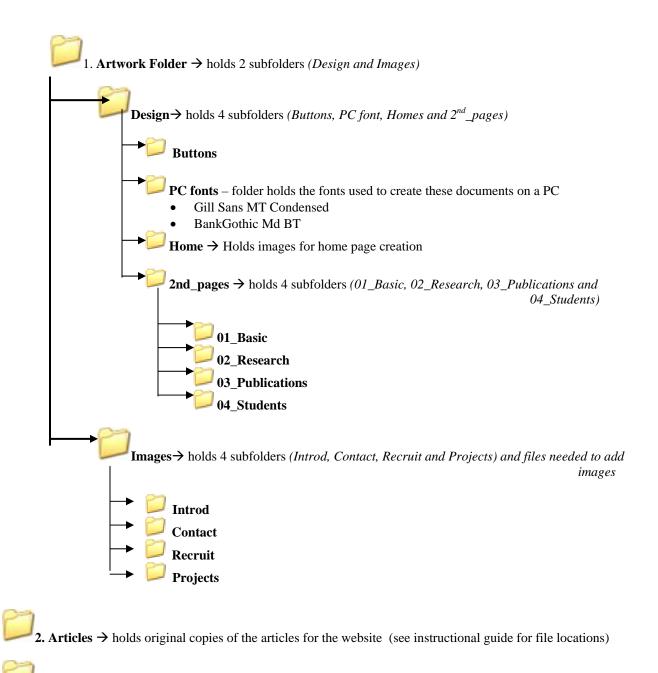
To update the glossary or FAQ printer sheets update the word document and reconvert the file to a PDF with the same name and same folder location on the site.

The format of inserting text from a word document was also utilized to create the lab profiles section. Anchors were also used to jump to any lab member's name.

To add new lab member's information or add new information, ask the person to answer the following questions and add the information to the site.

Lab Members Information and Contact Lab Members Name: Official title: Position in the lab: Contact information: Links to any UTSW sites: Educational Background: Current Projects: Research Interests: What I do when I am in the lab: What I do when I am outside of the lab: <u>Current Projects:</u>

File Outline (Storage Media→ 4 folders, Instructional Guide and Update Directions)



3. Text \rightarrow holds original text files for the website (see instructional guide for file locations on site)

4. nestler_lab \rightarrow holds all of the files that go online to create the website

File Locations

 \sim Design Folder \rightarrow This folder holds the pieces needed to construct the pages and the fonts to edit the text

 \rightarrow Buttons \rightarrow flatted versions of the right and left arrows

- arrows.psd → Photoshop file with the right and left arrows and their over colors in separate layers
 o Flatted versions located in buttons folder
- arrows.eps → eps copy of the photoshop file with the right and left arrows and their over colors in separate layers
- arrow.ai \rightarrow illustrator file used to create the arrows
- arrow.eps \rightarrow eps copy of the illustrator file used to create the arrows

Home Page Files

• Update Text on Home page → Font: Arial Helvetica, Size=9pt, justify left; Home page color 000000(black); Bold names and date

Page Maintained by The Laboratory of Molecular Psychiatry Web page design by Meredith York Department of Biomedical Communications Last update: September 2, 2004

- home_text.psd
 - photoshop version of the home page with all of the original pieces separate and the text available to update
 - o fonts
 - Basic introduction line of text→ Gill Sans MT Condensed; Regular; Size=27pt; Leading 100; Tracking 100; align left; web colors = 000000 (black), FFCC33 (yellow)
 - Lab name top line of text→ BankGothic Md BT; Medium; Size=31pt; Leading 27; Tracking =27; align left; web colors = 000000 (black),
 - Lab name lower line of text→ BankGothic Md BT; Medium; Size=38pt; Leading 27; Tracking=0; align left; web colors = 000000 (black),
- home_text.eps
 - EPS copy of the photoshop file
- index_3.gif \rightarrow The flattened top half of the home page that is a copy of the file for the home page
- index_backg_3.gif → flat background image that is a copy of the file for the home page; in dreamweaver assign as background image; Repeat=no-repeat; Attachment=scroll; Horizontal position =left; Vertical position=top
- Rollovers
 - $\circ \quad 01_a.gif \rightarrow Basic Introduction$
 - \circ 01_b.gif \rightarrow Basic Introduction rollover
 - \circ 02_a.gif \rightarrow Research
 - \circ 02_b.gif \rightarrow Research rollover

- \circ 03_a.gif \rightarrow Publications
- \circ 03_b.gif \rightarrow Publications rollover
- $\circ \quad 04_a.gif \rightarrow Potential Students$
- $\circ \quad 04_b.gif \rightarrow Potential Students \ rollover$
- $\circ \quad 05_a.gif \rightarrow Contact$
- \circ 05_b.gif \rightarrow Contact rollover

2nd_pages

• Update Text→ Font: Arial Helvetica, Size=9pt, justify left; Home page color 666699(blue); Bold names and date

Page Maintained by The Laboratory of Molecular Psychiatry Web page design by Meredith York Last update: September 2, 2004

- Headline Text: ex: Contact → Font: Arial Helvetica, Size=12pt, Bold; justify left; color 000000(black);
- Body Text: → Font: Arial Helvetica, Size=10-14pt depending on amount of text; center justify; color 000000(black);
- background_b.gif → flat background image that is a copy of the file for the secondary pages; in dreamweaver assign as background image; Repeat=no-repeat; Attachment=scroll; Horizontal position=left; Vertical position=top
- secondary.psd
 - photoshop version of the secondary pages with all of the original pieces separate and the text available to update
 - o fonts
 - Basic introduction line of text → Gill Sans MT Condensed; Regular; Size=14pt; Leading 100; Tracking 100; align left; web colors = 000000 (black)
 - Lab name top line of text→ BankGothic Md BT; Medium; Size=18pt; Leading 14; Tracking =0; align left; web colors = 000000 (black), FFFFFF (white)
 - Lab name lower line of text→ BankGothic Md BT; Medium; Size=23pt; Leading 14; Tracking=0; align left; web colors = 000000 (black), FFFFFF (white)
- secondary.eps
 - EPS copy of the photoshop file
- SIDEBAR_2.gif \rightarrow color bands sidebar that appears on the left side of each secondary page
- Drugs.gif \rightarrow image that appears at the bottom of each secondary page
- side_text.psd \rightarrow
 - Sidebar text formatting Top size → Gill Sans MT Condensed; Regular; Faux Bold; Size=19pt; Leading 20; Tracking 27; align left; web colors = 000000 (black)
 - Drop shadow→ Mode=Multiply; Web Color= FF9933 (orange); Opacity 75%; Angle 120degree; Use global angle; Distance=5; Blur=5; Intensity=0

- Sidebar text formatting Middle Size→ Gill Sans MT Condensed; Regular; Size=13pt; Leading 20; Tracking 27; align left; web colors = 000000 (black)
 - Drop shadow→ Mode=Multiply; Web Color= FF9933 (orange); Opacity 75%; Angle 120degree; Use global angle; Distance=5; Blur=5;
- o side_text.eps copy
- text_2.psd
 - Sidebar text formatting Top size → Gill Sans MT Condensed; Regular; Faux Bold; Size=19pt; Leading 20; Tracking 27; align left; web colors = 000000 (black)
 - Drop shadow→ Mode=Multiply; Web Color= FF9933 (orange); Opacity 75%; Angle 120degree; Use global angle; Distance=5; Blur=5; Intensity=0
 - Sidebar text formatting Middle Size → Gill Sans MT Condensed; Regular; Size=13pt; Leading 20; Tracking 27; align left; web colors = 000000 (black)
 - Drop shadow→ Mode=Multiply; Web Color= FF9933 (orange); Opacity 75%; Angle 120degree; Use global angle; Distance=5; Blur=5; Intensity=0
 - Sidebar text formatting Smallest Size→ Gill Sans MT Condensed; Regular;
 Size=10pt; Leading 11; Tracking 27; align left; web colors = 000000 (black)
 - Drop shadow→ Mode=Multiply; Web Color= 3333CC (cobalt); Opacity 75%; Angle 120degree; Use global angle; Distance=5; Blur=5; Intensity=0
 - o text_2.eps copy

The following folders contain flattened and sliced versions of the text for the side rollovers organized by the pages they appear on

01_Basic 02_Research 03_Publications 04 Students

 \rightarrow Images Folder \rightarrow This folder holds the images currently posted on the website

- box.ai \rightarrow illustrator file that can be resized to create the box to go around any new images for new updates
- box.eps → eps copy of the illustrator file that can be resized to create the box to go around any new images for new updates
- box.psd → photoshop file with a path of the box that can be resized to create the box to go around any new images for new updates
- box_copy.eps \rightarrow eps copy of the photoshop file

The following folders contain flattened copies of the images for the secondary pages organized by the pages they appear on

- Introd
- Contact
- Recruit
- Projects

File Name	File Copy	Artwork Folder	HTML Page(s)	Comments
		Location	intended for use on	
Basic_01.gif	Basic_01.jpg	Intro	Basic_01a.htm	Group photo
Basic_02.gif	Basic_02.jpg	Intro	Mole_b01.htm	AIM editorial 3D
Basic_03.gif	Basic_03.jpg	Intro	Mole_b01.htm	Heroin Diagram
Basic_04.gif	Basic_04.jpg	Intro	Mole_b0.htm	Cocaine Diagram
Basic_05.gif	Basic_05. jpg	Intro	Mole_b01.htm	3D Head editorial
Basic_06.gif	Basic_06. jpg	Intro	Mole_b01.htm	3d Brain Regions
Basic_07.gif	Basic_07. jpg	Intro	Paths_b02.htm	Regions Diagram
Basic_08.gif	Basic_08. jpg	Intro	Paths_b02.htm	Pathways still
Basic_09.gif	Basic_09. jpg	Intro	Post_b03.htm	Signal receptor
Basic_10.gif	Basic_10. jpg	Intro	Sign_b04.htm	Dancing Diagram
Basic_11.gif	Basic_11. jpg	Intro	Creb_b05.htm	Purple Diagram
Basic_12.gif	Basic_12. jpg	Intro	Fos_b06.htm	Small blue Diagram
Basic_13.gif	Basic_13. jpg	Intro	Fos_b06.htm	Large blue Diagram
Basic_14.gif	Basic_14. jpg	Intro	Gloss_01.htm	DNA editorial
Basic_15.gif	Basic_15. jpg	Intro	Gloss_01.htm	3d Brain Regions
Basic_16.gif	Basic_16. jpg	Intro	Gloss_01.htm	Pathways still
Basic_17.gif	Basic_17. jpg	Intro	Gloss_01.htm	Transcription Factors still
Basic_18.gif	Basic_18. jpg	Intro	FAQ_01.htm	Kids learning
Basic_19.gif	Basic_19. jpg	Intro	Links_01.htm	Nicotine Diagram
rsrch_01.gif	rsrch_01. jpg	Projects	Research.htm	Jars
rsrch_02.gif	rsrch_02. jpg	Projects	Proj_01.htm	Yellow diagram
rsrch_03.gif	rsrch_03. jpg	Projects	Proj_02.htm	Green diagram
rsrch_04.gif	rsrch_04. jpg	Projects	Proj_03.htm	Gel
rsrch_05.gif	rsrch_05. jpg	Projects	Proj_03.htm	Transcription still
rsrch_06.gif	rsrch_06. jpg	Projects	Proj_04.htm	Neural responses
rsrch_07.gif	rsrch_07. jpg	Projects	Proj_04.htm	Pathways still
rsrch_08.gif	rsrch_08. jpg	Projects	Expirm_01.htm	Head cross section
rsrch_09.gif	rsrch_09. jpg	Projects	Expirm_01.htm	Night school
rsrch_10.gif	rsrch_10. jpg	Projects	Expirm_02.htm	Herpes
rsrch_11.gif	rsrch_11. jpg	Projects	Expirm_03.htm	Transgene
rsrch_12.gif	rsrch_12. jpg	Projects	Expirm_04.htm	Pill bottle with mouse
rsrch_13.gif	rsrch_13. jpg	Projects	Expirm_04	Mouse
rsrch_14.gif	rsrch_14. jpg	Projects	Expirm_05	Petri dish
rec_01.gif	rec_01. jpg	Recruit	Students.htm	2 people reading
rec_02.gif	rec_02. jpg	Recruit	Students_02.htm	Lab photo
rec_03.gif	rec_03.jpg	Recruit	Students_03.htm	UTSW
rec_04.gif	rec_04. jpg	Recruit	Students_03.htm	UTSW at night
rec_05.gif	rec_05. jpg	Recruit	Students_05.htm	Nicotine
Cont_01.gif	Cont_01. jpg	Contact	Contact.htm	Dr. Nestler

BIBLIOGRAPHY

Brainard, Shirl. (2003). A Design Manual. 3rd ed. New Jersey: Pearson Education, Inc.

- Breen, George & Blankenship, A.B. (1989). Do-It-Yourself Marketing Research. 3rd ed. New York: McGraw-Hill Publishing.
- Briscoe, Mary Helen. (1990). A Researcher's Guide to Scientific and Medical Illustrations. New York: Springer-Verlag.
- Briscoe, Mary Helen. (1996). Preparing Scientific Illustrations: a Guide to Better Posters, Presentations, and Publications. 2nd ed. New York: Springer.
- Fehrman, Kenneth R. & Fehrman, Cherie. (2000). Color The Secret Influence. Upper Saddle River, New Jersey: Prentice-Hall, Inc.
- Goldstein, Norm (ed). (2004). The Associated Press Stylebook and Briefing on Media Law. New York: Basic Books.
- Hoover, Hardy. (1980). Essentials for the Scientific and Technical Writer. New York: Dover Publications, Inc.
- Lynch, Patrick J, & Horton, Sarah. (1999). Web Style Guide. New Haven: Yale University Press.
- Nielsen, Jakob. (2000). Designing Web Usability: The Practice of Simplicity. Indianapolis, Indiana: New Riders Publishing.
- Nestler, E. J. (2002). Neurobiology of Depression, Neuron, 34,13-25.
- Nestler, E. J., Hyman, S. E. & Malenka, R. C., (2001). Molecular Neuropharmacology: A Foundation for Clinical Neuroscience. New York: McGraw-Hill.
- Nestler, E. J. (2003). Nestler Lab Website Material: Laboratory of Molecular Psychiatry. Unpublished
- Siegel, Davis. (1997).Secrets of Successful Web Sites: Project Management on the World Wide Web. Indianapolis: Hayden Books.
- Strunk, William Jr. & White, E.B. (2000). The Elements of Style. 4th ed. Needham Heights, Massachusetts: Longman Publishers.
- Towers, J. Tarin. (2000). Visual Quickstart Guide Dreamweaver 3 for Windows and Macintosh. Berkeley, CA: Peachpit Press.

Walther, Ingo F. (2000). Van Gogh. Germany: Taschen.

- Wileman, Ralph E. (1993). Visual Communicating. Englewood Cliffs, New Jersey: Educational Technology Publication.
- Wilkins, David G., Schultz, Bernard, & Linduff, Katheryn M. (1997). Art Past Art Present. 3rd ed. New York: Prentice Hall, Inc.
- Wilkins, Marla Rochelle. (2003). <u>The Development of an Instructional Module on the</u> <u>Basis of Web Design for Scientists Interested In Creating A Web Page.</u>

VITAE

Meredith York was born in Atlanta, Georgia, on December 9, 1978, the first of the three daughters of William and Maria York. After completing her work at Harrison High School, in Kennesaw, Georgia in 1997, she entered The University of Georgia in Athens, Georgia. During the summer of 2000 she attended the University of Georgia's Study Abroad Program in Cortona, Italy where she studied art history, photography and watercolor painting. Meredith received the degree of Bachelor of Fine Arts with a major in Interdisciplinary Studies (Scientific Illustration) from The University of Georgia in December 2001 with the intention of pursuing a Master's Degree in the field of Medical Illustration. In May 2002 she entered the Graduate Program in Biomedical Communications in the Graduate School of Biomedical Sciences at the University of Texas Medical Center at Dallas. Meredith was awarded the degree of Master of Arts in the fall of 2004.

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