

National Institute of Mental Health
Division of Intramural Research Programs

2.5.13

User Research Findings & Recommendations

PREPARED BY:

Spencer Gerrol

Andrew Schall

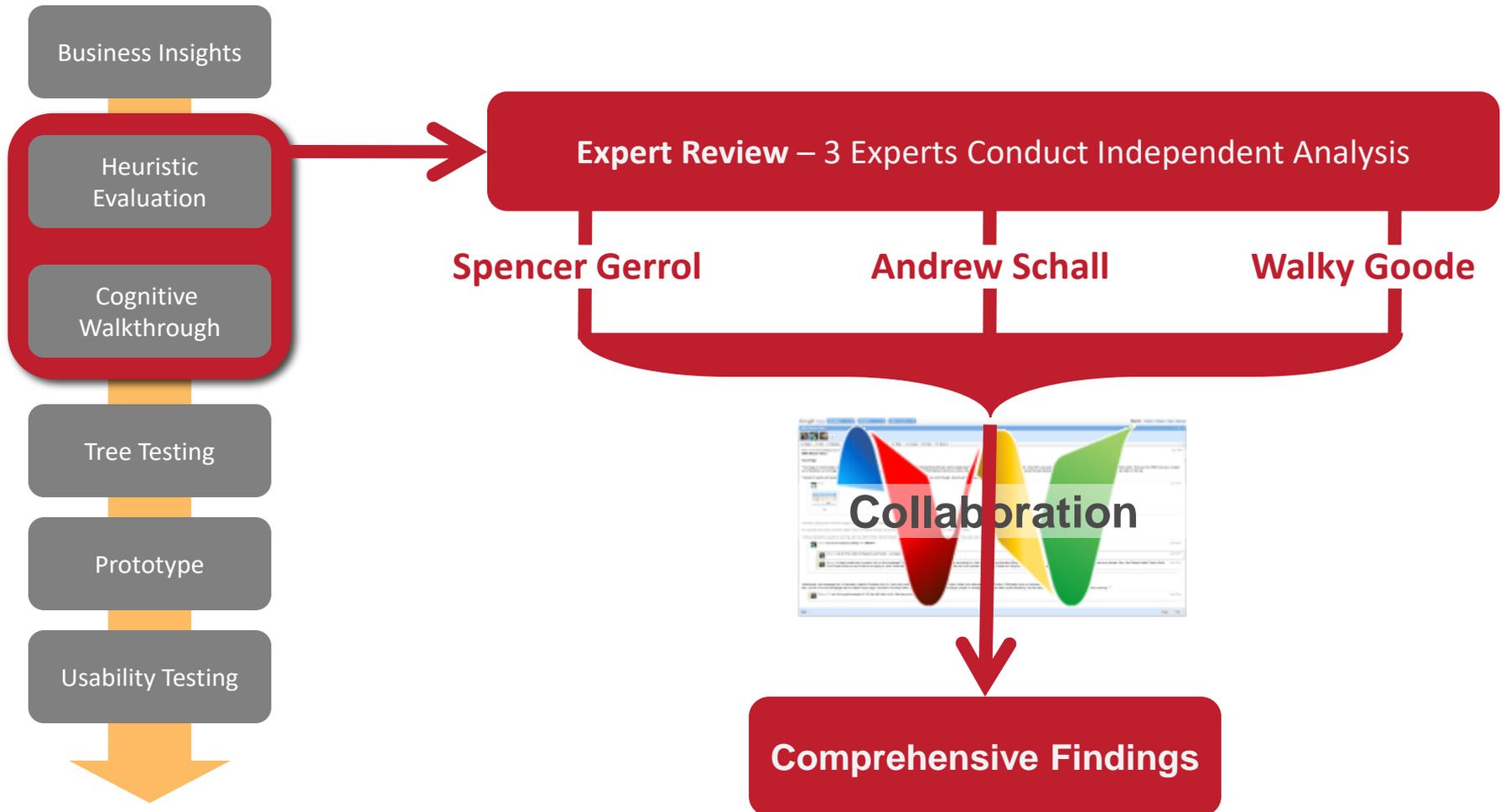
Hal Miller-Jacobs

SPARK Experience Design

PREPARED FOR:

NIMH

Overview of User Experience Evaluation Process



Overview of User Experience Evaluation Process

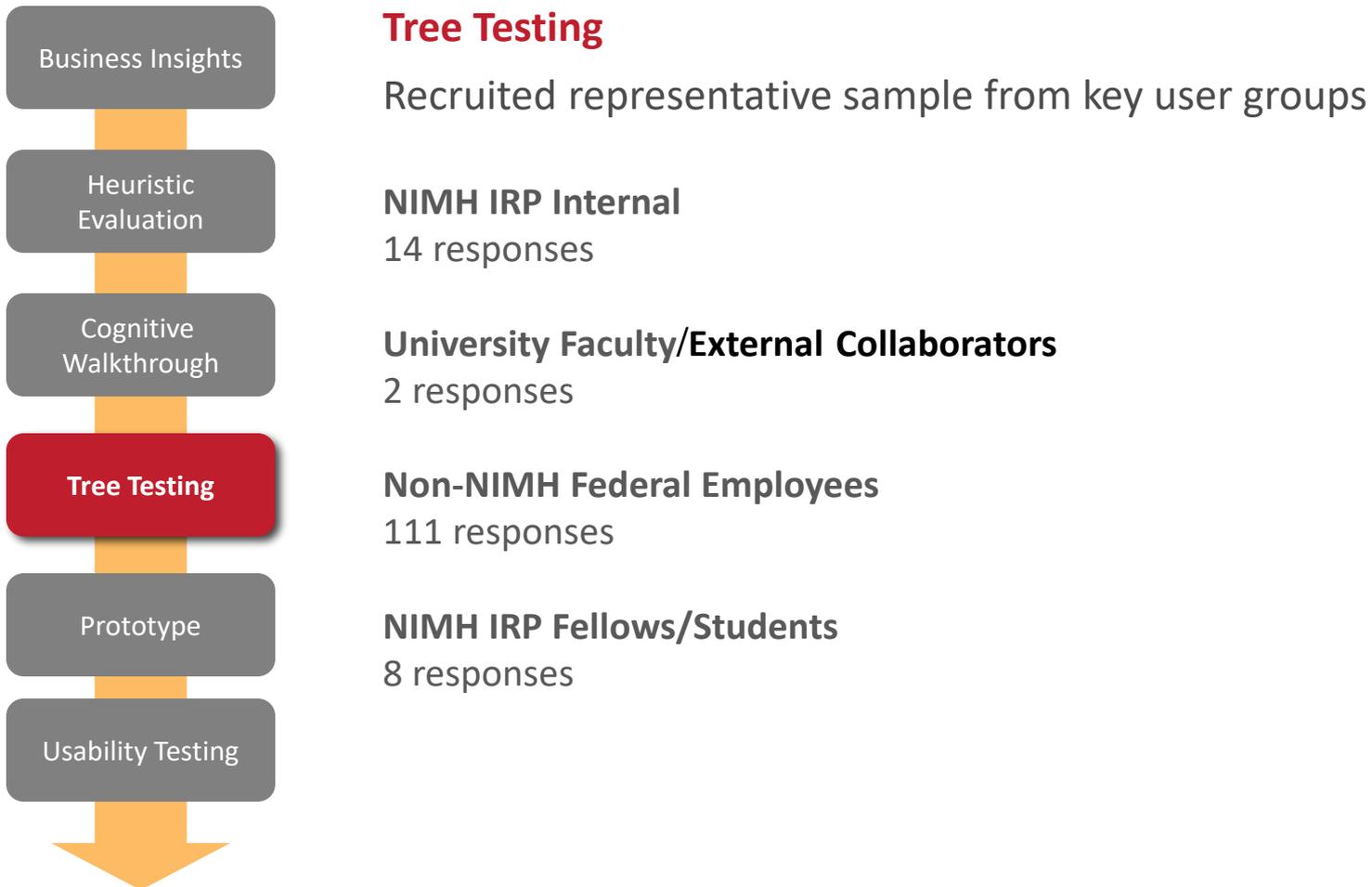


Tree Testing

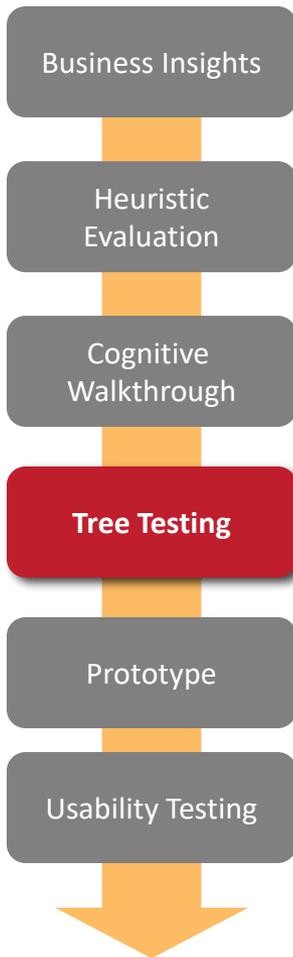
Conducted a tree test in order to validate and improve the new information architecture (IA)

- ✦ Recruited representative sample from key user groups
- ✦ Requested users to complete tasks using the new IA
- ✦ Tracked stumbling points and task success
- ✦ Revised the IA based on tree test results

Overview of User Experience Evaluation Process

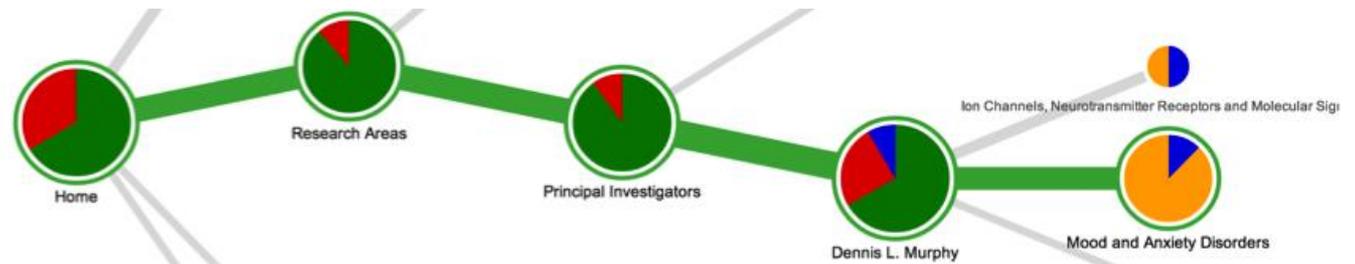


Overview of User Experience Evaluation Process



Tree Testing

Tracked stumbling points and task success



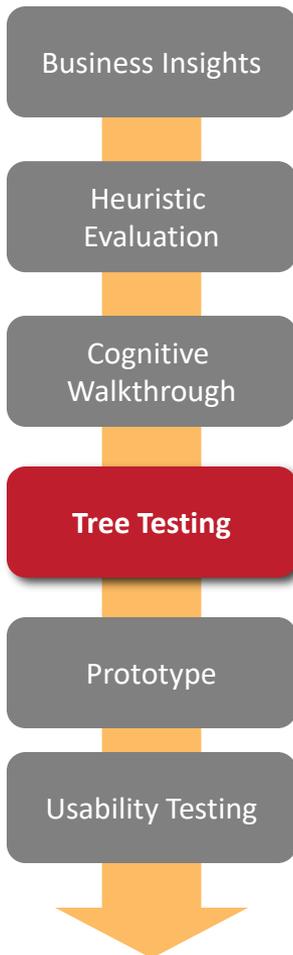
“Resources for Staff” label caused confusion

This generic, ‘catch-all’ label led participants off track as they hunted for the right content.

Participants showed difficulty locating a specific PI

About DIRP and Resources for Staff were common locations where participants said they would find this information.

Overview of User Experience Evaluation Process

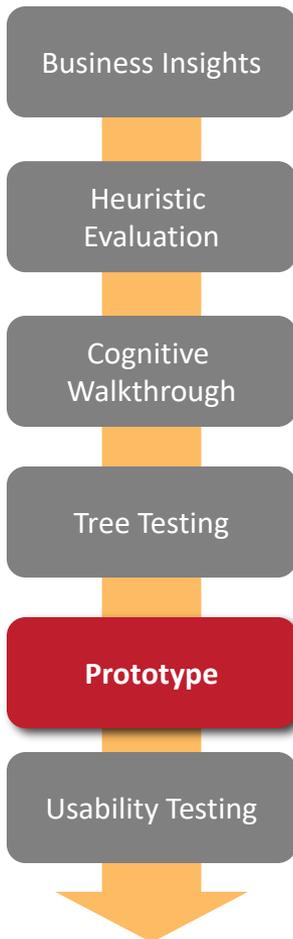


Tree Testing

Revised the IA based on tree test results

- **Rename “Resources for Staff” to “For DIRP Staff”**
Using an audience-based label clarifies the type of content a user will find there. The category was also moved to the utility navigation.
- **Make sure the homepage includes a prominent access point (button, link) to the list of Principal Investigators**
- **Incorporate a cross-linking system into the design**
Incorrect paths followed by users in the tree study help determine what content should be cross-linked, e.g. Labs, Branches, and Sections and Principal Investigators under the About DIRP category and About the Clinical Center under Core Services

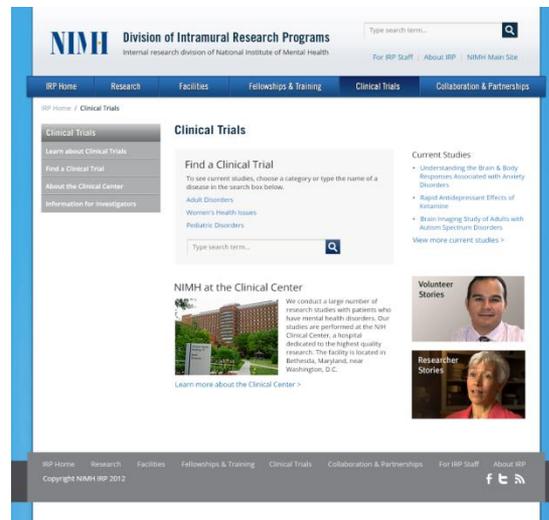
Overview of User Experience Evaluation Process



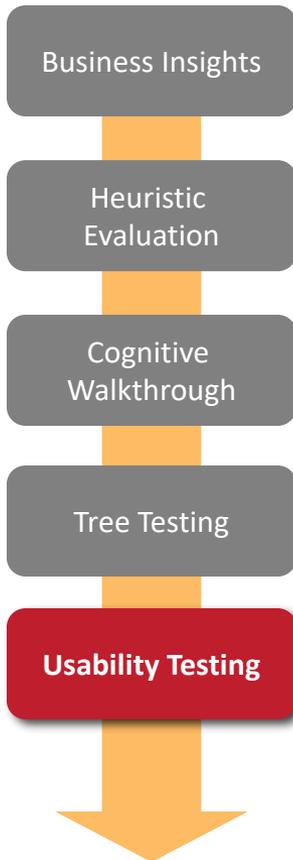
Prototype Development

Developed a clickable prototype to be evaluated during the usability test.

- ✦ Incorporated the recommendations from the expert review and tree test
- ✦ Modified the prototype based on feedback from the usability test



Overview of User Experience Evaluation Process



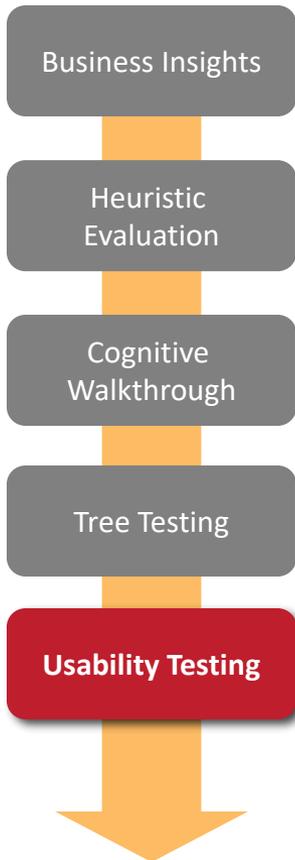
Usability Testing

Observed representative users interacting with the website

- ✦ Recruited representative sample from key user groups
- ✦ Observed users completing real tasks
- ✦ Tracked stumbling points and user experience issues

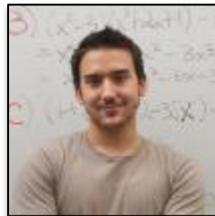


Overview of User Experience Evaluation Process



Usability Testing

Recruited representative sample from key user groups



Students (4)



Faculty (3)



General Public (5)



IRP Staff (3)



Practitioners (3)

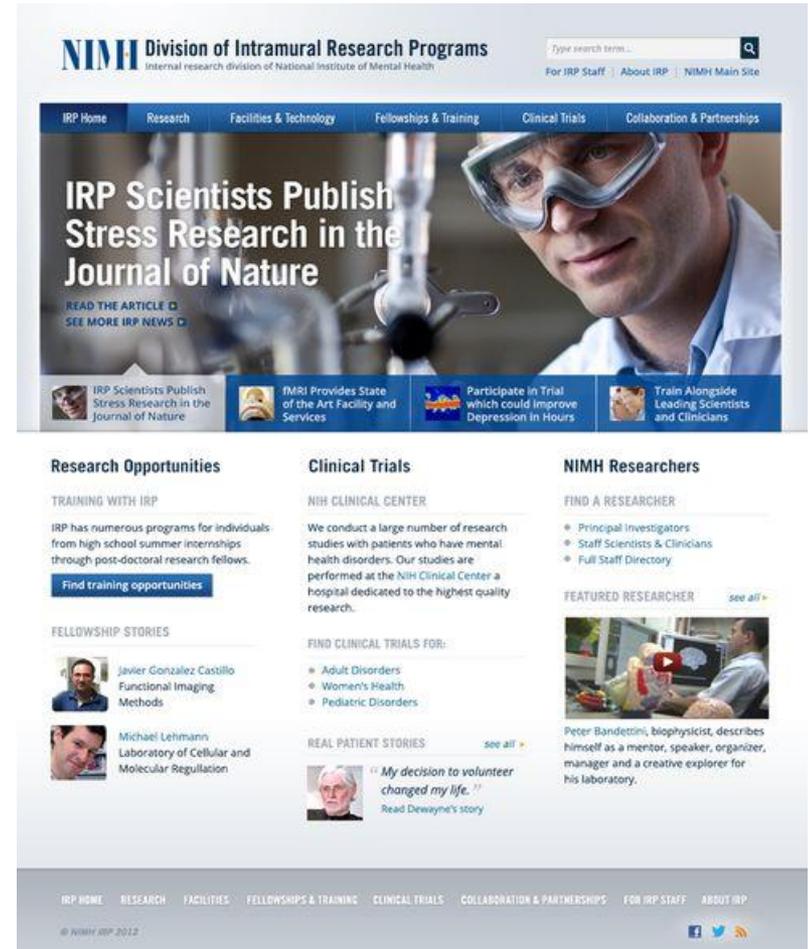
Summary of Findings: Current Site

- The current website is not designed for the tasks that its primary audiences (e.g. potential research fellows, researchers, etc.) need to achieve
- The website's navigation was often confusing
- Page content was often difficult to skim and caused participants to miss key information
- Most participants were critical of the visual design



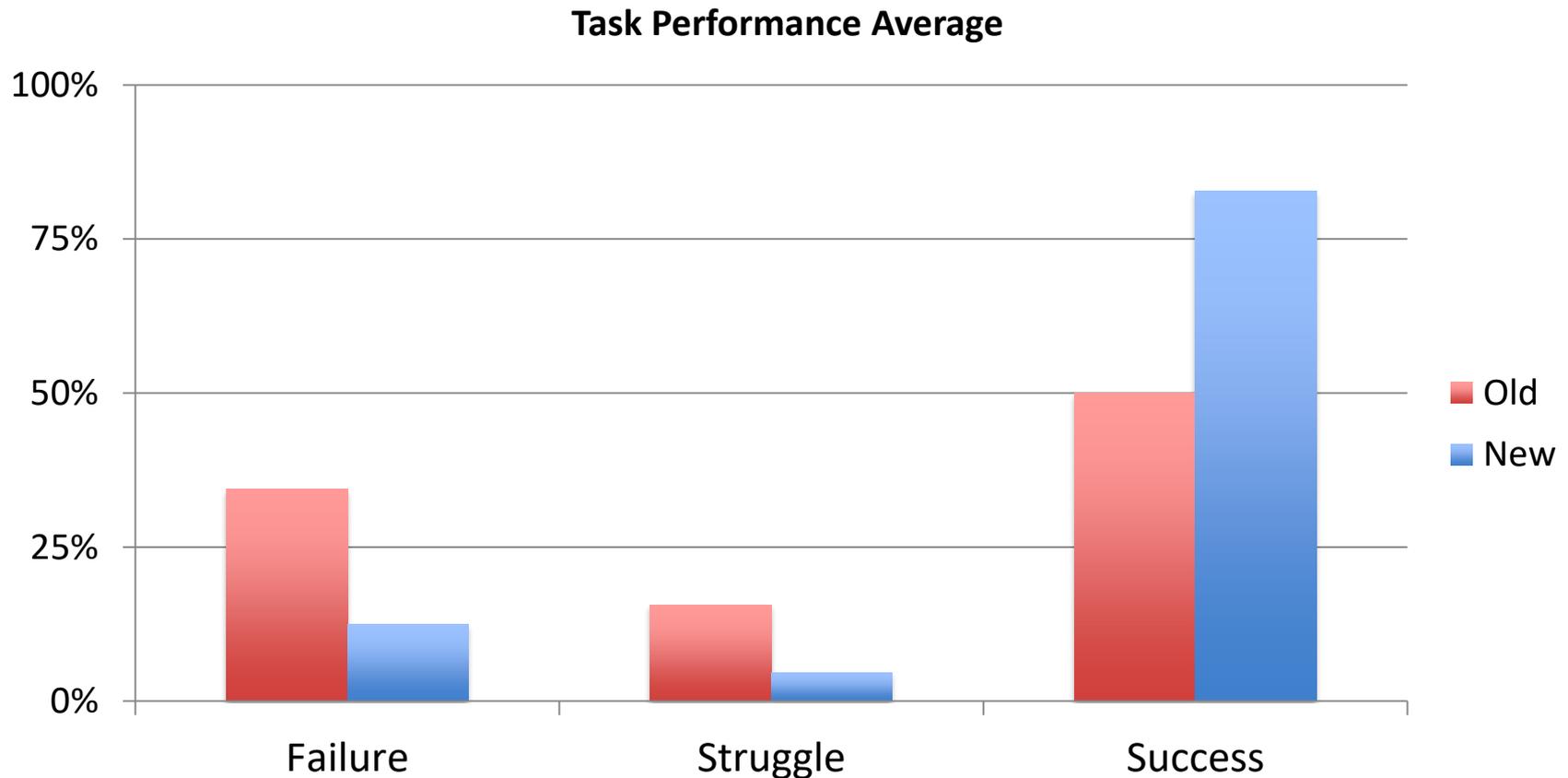
Summary of Findings: Prototype

- All participants enthusiastically reported that they would prefer to use the prototype over the existing website
- The prototype succeeded in meeting the needs of the target audiences
- Participants were able to complete most tasks quickly and easily
- The layout and organization helped participants to quickly understand the content
- All participants reported that they liked the new visual design



The Prototype Was Easier to Use

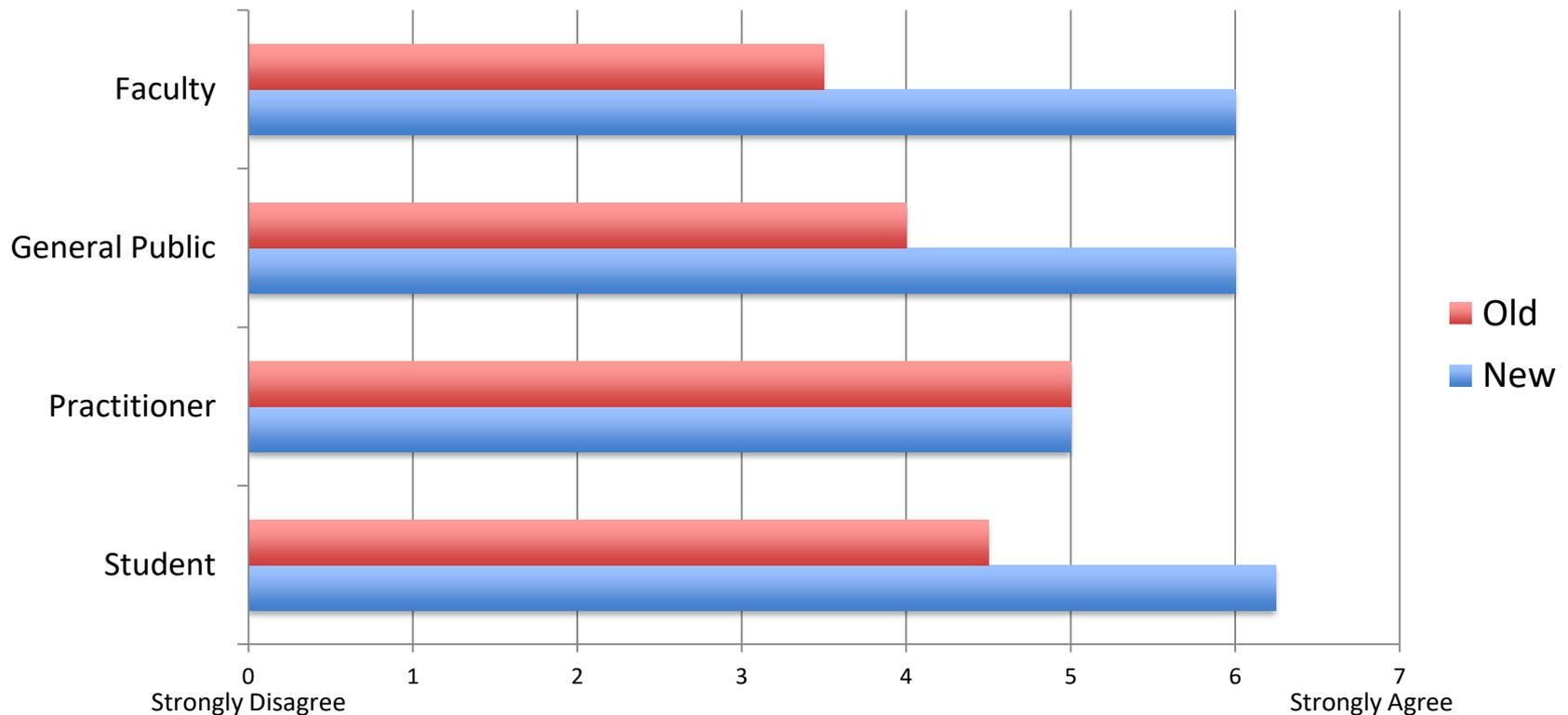
Participants were asked to complete a series of information-seeking tasks using both the current site (old) and using the prototype (new).



Most Strongly Preferred the Prototype

Participants were asked to rate their level of agreement with a series of statements at the end of their experience with both the current site (old) and prototype (new).

**Overall, the website left me with a positive impression of NIMH's
Intramural Research Program**



Home Page



Where it all begins

The Home Page Design Did Not Make a Good First Impression

The visual design of the home page did not encourage participants to explore the website

The current presentation of content makes it difficult to know what to focus on and does not help a user to quickly identify the areas that would aid in task completion.

Participants commented that areas of the page are extremely dense with text while other areas have too much whitespace, making the page feel unbalanced. Only one participant wanted to read the paragraph of text.

The screenshot shows the home page of the National Institute of Mental Health (NIMH) Division of Intramural Research Programs (DIRP). The page features a header with the NIMH logo and a search bar. Below the header is a navigation menu with tabs for 'DIRP HOME', 'ABOUT DIRP', 'RESEARCH', 'CORE FACILITIES', and 'INFORMATION FOR STAFF'. The main content area is divided into several sections: a large text block on the left describing the DIRP, a 'CAREERS AT NIMH' section with a logo, and a 'PARTICIPATE IN RESEARCH' section with an image of a building. The right side of the page contains several smaller sections with links to various resources, including 'About the DIRP', 'Core Facilities', 'Research at DIRP', and 'Information for Staff'. The page footer includes a date of last update (August 29, 2012) and a list of links for 'Site Map', 'Staff Directories', 'Contact NIMH DIRP', 'Employment Opportunities', 'Privacy Notice', 'Policies', 'FOIA', and 'Accessibility'. Logos for NIMH, USA.gov, and the NIMH motto 'Turning Discovery Into Health' are also present.

The Home Page Content isn't Helpful

Participants could not easily gain an understanding of what IRP is about

Most participants struggled to understand what IRP is and what the organization does.

Several participants stated that the website seemed to target an internal audience and did not appear to be for the public.

The screenshot shows the homepage of the National Institute of Mental Health (NIMH) Division of Intramural Research Programs (DIRP). The page features a header with the NIMH logo and tagline, a search bar, and a navigation menu. A red box highlights the introductory text about the DIRP, which is dense and technical. Below this, there are several columns of links and a large banner for 'CAREERS AT NIMH IN INTRAMURAL RESEARCH'. The footer contains a date, a list of links, and logos for NIMH and USA.gov.

NATIONAL INSTITUTES OF HEALTH SEARCH THIS SITE

NIMH National Institute of Mental Health
Transforming the understanding and treatment of mental illness through research

DIVISION OF INTRAMURAL RESEARCH PROGRAMS

[DIRP HOME](#) [ABOUT DIRP](#) [RESEARCH](#) [CORE FACILITIES](#) [INFORMATION FOR STAFF](#)

The Division of Intramural Research Programs (DIRP) at the National Institute of Mental Health (NIMH) is the internal research division of the NIMH. NIMH DIRP scientists conduct research ranging from studies into mechanisms of normal brain function, conducted at the behavioral, systems, cellular, and molecular levels, to clinical investigations into the diagnosis, treatment and prevention of mental illness. Major disease entities studied throughout the lifespan include mood disorders and anxiety, schizophrenia, obsessive-compulsive disorder, attention deficit hyperactivity disorder, and pediatric autoimmune neuropsychiatric disorders. Because of its outstanding resources, unique funding mechanisms, and location in the nation's capital, the DIRP is viewed as a national resource, providing unique opportunities in mental health research and research training. [\[more\]](#)

About the DIRP

- Office of the Scientific Director
- Site Map
- Participate in Research
- Contact Us
- Careers in Research
- What's New

Research at DIRP

- Principal Investigators
- Scientists & Clinicians
- DIRP Labs and Branches
- DIRP Research Areas

Core Facilities

- Functional MRI Core
- Magnetic Resonance Core
- Magnetoencephalography Core
- Microarray Core
- Neurophysiology Imaging Facility
- Scientific and Statistical Computing Core
- Section on Instrumentation
- Transgenic Core
- Veterinary Medicine Resources (Staff only)

Information for Staff

- Office of the Scientific Director
- Office of the Clinical Director
- Office of Fellowship Training
- Office of Technology Transfer
- Administrative Services Branch
- Administrative Services

CAREERS AT NIMH IN INTRAMURAL RESEARCH

PARTICIPATE IN RESEARCH

Learn how to be part of a NIMH Research Project

This page was last updated August 29, 2012.

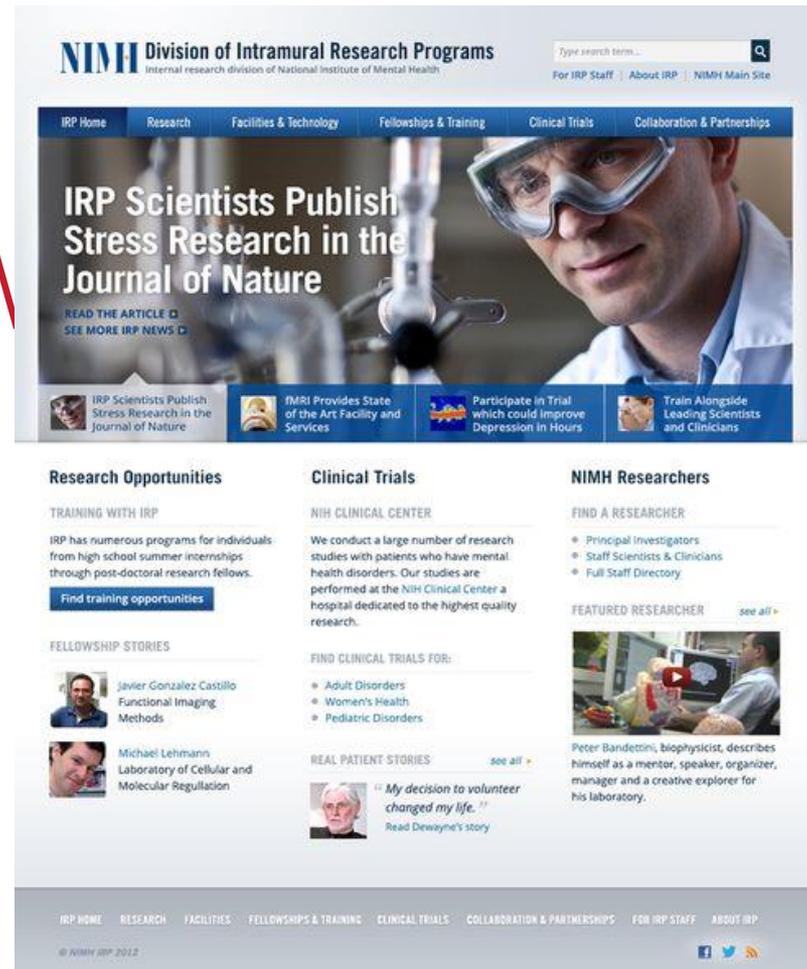
[Site Map](#) [Staff Directories](#) [Contact NIMH DIRP](#) [Employment Opportunities](#) [Privacy Notice](#) [Policies](#) [FOIA](#) [Accessibility](#)

The Division of Intramural Research Programs is within the National Institute of Mental Health (NIMH) is a part the National Institutes of Health (NIH), is a component of the U.S. Department of Health and Human Services.

The Prototype Home Page Is Fresh & Inviting

The new design gave participants a better overview of IRP and encouraged them to explore the website

Participants were able to quickly gain an understanding of the primary offerings of IRP by looking at the home page content.



Feature Box Blocks Too Much of the Photo

Participants did not like that the feature box blocked a significant portion of the photo.

The visual treatment of the box also made it difficult for some participants to associate the feature box content with the photo.

Revised Prototype Design

Removed the feature box from the prototype's home page.



DIRP Is an Unflattering Acronym

Some participants suggested using IRP instead of DIRP when referring to the program

Some participants were familiar with the term “DIRP” (also pronounced derp) being used in an unflattering context.

According to the Urban Dictionary, the term “derp” refers to, “A simple, undefined reply when an ignorant comment or action is made”.

Opportunities for improvement

Provide the complete name of the Program, “Division of Intramural Research Programs” in the page header, but consistently refer to the program simply as IRP.

The screenshot shows the NIMH website for the Division of Intramural Research Programs (DIRP). The header includes the NIMH logo and the tagline "Transforming the understanding and treatment of mental illness through research". The navigation menu includes "DIRP HOME", "ABOUT DIRP" (highlighted with a red box), "RESEARCH", "CORE FACILITIES", and "INFORMATION FOR STAFF". The main content area is divided into three columns: "About the DIRP" (describing the division's research focus), "Core Facilities" (listing various research cores), and "Information for Staff" (listing various offices and services). A "PARTICIPATE IN RESEARCH" banner is visible at the bottom right, featuring an aerial view of the NIMH campus and the text "Learn how to be part of a NIMH Research Project".



Navigation

Getting from here to there

Confusing Secondary Navigation

Participants did not always understand how the navigation was organized

Participants reported that the right navigation was not always clear and did not help them to complete certain tasks.

Participants would sometimes miss navigation items that would have helped with task completion.

Participants were confused by the label “Information for Staff” and were unsure whether they would find useful information within this category.

The screenshot displays the website for the Division of Intramural Research Programs (DIRP) at the National Institute of Mental Health (NIMH). The header includes the NIMH logo and the text "National Institute of Mental Health" and "Transforming the understanding and treatment of mental illness through research". Below the header is a navigation bar with buttons for "DIRP HOME", "ABOUT DIRP", "RESEARCH", "CORE FACILITIES", and "INFORMATION FOR STAFF". The main content area is titled "RESEARCH AT DIRP" and contains a paragraph describing the division's mission and a list of research areas. A sidebar on the right contains a list of navigation items, including "Research at DIRP", "Core Facilities", "Information for Staff", and "About the DIRP". A red box highlights the sidebar content.

NATIONAL INSTITUTES OF HEALTH SEARCH THIS SITE

NIMH National Institute of Mental Health

Transforming the understanding and treatment of mental illness through research

DIVISION OF INTRAMURAL RESEARCH PROGRAMS

[DIRP HOME](#) [ABOUT DIRP](#) [RESEARCH](#) [CORE FACILITIES](#) [INFORMATION FOR STAFF](#)

RESEARCH AT DIRP

The **Division of Intramural Research Programs (DIRP)** at the National Institute of Mental Health (NIMH) is the internal research division of the NIMH. The mission of the division is to plan and conduct basic, clinical, and translational research to advance understanding of the diagnosis, causes, treatment, and prevention of mental disorders through the study of brain function and behavior; conduct state-of-the-art research that, in part, complements extramural research activities and exploits the special resources of the National Institutes of Health; and provide an environment conducive to the training and development of clinical and basic scientists. In addition the DIRP fosters standards of excellence in the ethical treatment and the provision of clinical care to research subjects; serve as a resource to the NIMH in responding to requests made by the Administration, members of Congress, and citizens' groups for information regarding mental disorders; and analyzes and evaluates national needs and research opportunities and provides advice to the Institute Director on matters of scientific interest.

NIMH DIRP scientists conduct research ranging from studies into mechanisms of normal brain function, conducted at the behavioral, systems, cellular, and molecular levels, to clinical investigations into the diagnosis, treatment and prevention of mental illness. Major disease entities studied throughout the lifespan include mood disorders and anxiety, schizophrenia, obsessive-compulsive disorder, attention deficit hyperactivity disorder, and pediatric autoimmune neuropsychiatric disorders. Because of its outstanding resources, unique funding mechanisms, and location in the nation's capitol, the DIRP is viewed as a national resource, providing unique opportunities in mental health research and research training. Training is conducted in all the Institute's clinical branches and basic neuroscience laboratories located on the 305-acre National Institutes of Health campus in Bethesda, Maryland. In addition to individualized trainee/mentor-driven postdoctoral training opportunities in the clinical and basic sciences, the DIRP offers Postbaccalaureate Research Training Awards, a Clinical Electives Program, as well as a variety of Summer Research Fellowships and an Undergraduate Internship Program.

- Research at DIRP**
 - Principal Investigators
 - Scientists & Clinicians
 - DIRP Labs and Branches
 - DIRP Research Areas
- Core Facilities**
 - Functional MRI Core
 - Magnetic Resonance Core
 - Magnetoencephalography Core
 - Microarray Core
 - Scientific and Statistical Computing Core
 - Transgenic Core
 - Veterinary Medicine Resources (Staff only)
- Information for Staff**
 - Office of the Scientific Director
 - Office of the Clinical Director
 - Office of Fellowship Training
 - Office of Technology Transfer
 - Administrative Services Branch
 - Administrative Services
- About the DIRP**
 - Office of the Director
 - Site Map
 - Participate in Research

The Prototype Simplifies the Secondary Navigation

Participants found the secondary navigation easy to use

Participants reported that they liked having the associated description and images for each navigation item.

The screenshot displays the NIMH Division of Intramural Research Programs website. At the top, there is a search bar and navigation links for IRP Staff, About IRP, and NIMH Main Site. Below this is a dark blue navigation bar with links for IRP Home, Research, Facilities, Fellowships & Training, Clinical Trials, and Collaboration & Partnerships. The main content area features a 'Research Overview' sidebar with a list of research topics, including Alzheimer's Disease, Anxiety Disorders, Attention Deficit Disorders (ADHD, ADD), Autism Spectrum Disorders, Behavioral Neuroscience, Bipolar Disorder, Cell Biology, Child and Adolescent Psychiatry, Cognitive Neuroscience, Conduct Disorder, Depression, Epidemiology, Experimental Therapeutics, Functional Imaging, Molecular and Cellular Neuroscience, Molecular Imaging, Neural Development and Plasticity, Neuroendocrinology, Neurogenetics, Neuroimmunology and Virology (HIV), Obsessive Compulsive Disorder (OCD), Parkinson's Disease, Schizophrenia, and Systems and Translational Neuroscience. The main content area is titled 'Research Topics' and lists four categories: Alzheimer's Disease, Anxiety Disorders, Attention Deficit Disorders (ADHD, ADD), and Autism Spectrum Disorders. Each category includes a brief description, principal investigators, and affiliated groups. A red line on the left side of the screenshot points to the 'Research' navigation item in the top bar.

Research Overview

- Research Topics ▾
- Alzheimer's Disease
- Anxiety Disorders
- Attention Deficit Disorders (ADHD, ADD)
- Autism Spectrum Disorders
- Behavioral Neuroscience
- Bipolar Disorder
- Cell Biology
- Child and Adolescent Psychiatry
- Cognitive Neuroscience
- Conduct Disorder
- Depression
- Epidemiology
- Experimental Therapeutics
- Functional Imaging
- Molecular and Cellular Neuroscience
- Molecular Imaging
- Neural Development and Plasticity
- Neuroendocrinology
- Neurogenetics
- Neuroimmunology and Virology (HIV)
- Obsessive Compulsive Disorder (OCD)
- Parkinson's Disease
- Schizophrenia
- Systems and Translational Neuroscience

Research Topics

Alzheimer's Disease
Our research is committed to solving not only the problems of dementias of old age, but also to further understanding of the normally aging brain.
Principal Investigators: Alex Martin
Affiliated Groups: Laboratory of Brain And Cognition

Anxiety Disorders
This program supports studies of novel psychopharmacological and somatic approaches to alleviating the full range of symptoms associated with mood and anxiety disorders, including:

- Generalized Anxiety Disorder
- Obsessive Compulsive Disorder (OCD)
- Panic Disorder
- Social Anxiety Disorder

Principal Investigators: James Blair, Christian Grillon, Ellen Leibenluft, Francis McMahon, Kathleen Merikangas, Dennis L. Murphy, Daniel S. Pine, Peter J. Schmidt, Susan E. Swedo, Carlos A. Zarate
Affiliated Groups: Behavioral Endocrinology Branch, Emotion and Development Branch,

Attention Deficit Disorders (ADHD, ADD)
In our studies we use a combination of magnetic resonance brain imaging, clinical interviews, and psychological testing to better understand attention deficit disorders.
Principal Investigators: James Blair, Jay Giedd, Ellen Leibenluft, Judith L. Rapoport
Affiliated Groups: Child Psychiatry Branch, Emotion and Development Branch, Unit on Affective Cognitive Neuroscience

Autism Spectrum Disorders
Using brain imaging, we work to identify factors which influence the onset and expression of behavioral symptoms, and to develop more effective treatment and prevention strategies for childhood disorders.
Principal Investigators: Carolyn Beebe Smith, Alex Martin, Susan E. Swedo
Affiliated Groups: Laboratory of Brain And Cognition, Pediatric and Developmental

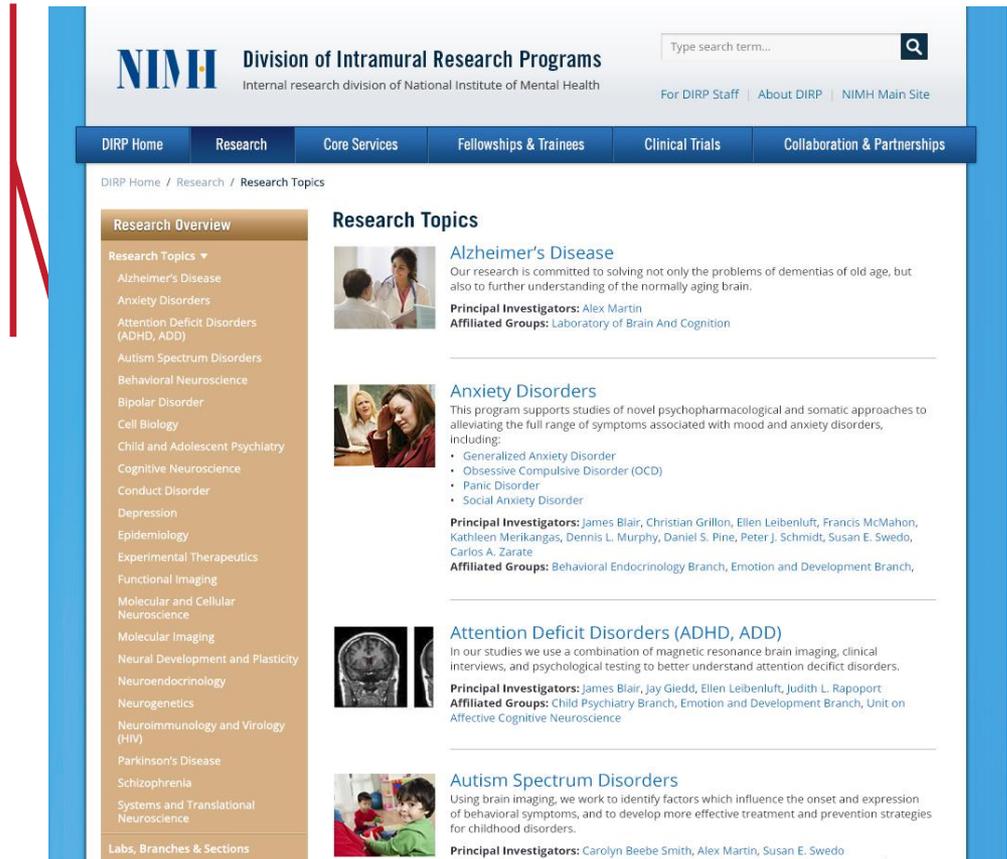
Secondary Navigation Lacked Sufficient Contrast

Some participants reported that the left navigation was a little difficult to see.

There was not a sufficient amount of contrast between the color of the text and the background color used in the navigation.

Enhanced Design

Enhanced the contrast by changing the hue to a bluish-gray color.



The Term “Core Services” Was Unclear

Most participants were unsure what they would find under Core Services

Participants thought that services referred to the types of activities performed at NIMH, and not equipment or technology offered by IRP.

Opportunities for improvement

Reposition this content as a subcategory and include a brief description that helps users understand that this is about the facilities and equipment available to IRP researchers.

The screenshot shows the NIMH Division of Intramural Research Programs (DIRP) website. At the top, there is a search bar and navigation links for DIRP Staff, About DIRP, and NIMH Main Site. A main navigation bar includes links for DIRP Home, Research, Core Services, Fellowships & Trainees, Clinical Trials, and Collaboration & Partnerships. The main content area features a large article titled "DIRP Scientists Publish Stress Research in the Journal of Nature" with a sub-headline and a "Read the article" button. Below this are several smaller news items with images and titles. The lower section is divided into three columns: "Research Opportunities" with links to "Find fellowships at NIMH" and "Find jobs at NIMH"; "Participate in a Clinical Trial" with a list of conditions (Adult Disorders, Women's Health, Pediatric Disorders) and a "Real patient stories" section; and "Featured Researcher" featuring Peter Bandettini, Biophysicist, with a video player and a link to learn more.

Difficult to Find Research Information

Participants often struggled to find information about research

Most participants were disappointed to see a list of PI's when they clicked on Research Areas.

They had expected to see some initial information about the research topics, and were frustrated that they had to click on one or more PI profiles to gain an understanding of current research.

The screenshot shows the NIMH DIRP website. At the top, there is a header for the National Institutes of Health and the National Institute of Mental Health. Below this is a navigation bar with buttons for 'DIRP HOME', 'ABOUT DIRP', 'RESEARCH', 'CORE FACILITIES', and 'INFORMATION FOR STAFF'. The main content area is titled 'Principle Investigators - Areas of Research Interests' and lists various research areas with their corresponding Principal Investigators. A red arrow points to the 'Research Areas' section, which is highlighted in yellow. The list of research areas and their PIs is as follows:

Research Area	Principal Investigator(s)
Aging and Alzheimer Disease	Alex Martin
Attention and Conduct Disorders	James Blair, Jay Giedd, Ellen Leibenluft, Judith Rapoport
Autism	Alex Martin, Carolyn Beebe Smith, Susan Swedo
Behavioral Neuroscience	Bruno B. Averbeck, Christian Grillon, David Leopold, Kazutoshi Nakazawa, Ted Usdin, James Blair, Miles Horkenham, Mortimer Mishkin, Judith L. Rapoport, Benjamin H. White, Heather A. Cameron, Ellen Leibenluft, Elizabeth Murray, Barry Richmond, Scott Young
Bipolar Disorders	Carlos A. Zarate
Cell Biology	Lee E. Eiden, Barry B. Kaplan, Zheng LI
Child and Adolescent Psychiatry	James Blair, Kathieen Merikangas, Susan E. Swedo, Jay Giedd, Daniel S. Pine, Ellen Leibenluft, Judith L. Rapoport

On the right side of the page, there are several sections: 'Research at DIRP' (Principal Investigators, Scientists & Clinicians, DIRP Labs and Branches, DIRP Research Areas), 'Core Facilities' (Functional MRI Core, Magnetic Resonance Core, Magnetoencephalography Core, Microarray Core, Scientific and Statistical Computing Core, Transgenic Core, Veterinary Medicine Resources (Staff only)), 'Information for Staff' (Office of the Scientific Director, Office of the Clinical Director, Office of Fellowship Training, Office of Technology Transfer, Administrative Services Branch, Administrative Services), and 'About the DIRP' (Office of the Director, Site Map, Participate in Research).

The Prototype Makes It Easy to Find Research

Participants easily found information about research at IRP

Participants were quick to find the research topics and found it easy to scan the list for the area that they were interested in.

They liked the formatting of the research topics and that it also made it easy to find associated PI's and affiliated groups.

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Research Overview

Research Topics

- Alzheimer's Disease
- Anxiety Disorders
- Attention Deficit Disorders (ADHD, ADD)
- Autism Spectrum Disorders
- Behavioral Neuroscience
- Bipolar Disorder
- Cell Biology
- Child and Adolescent Psychiatry
- Cognitive Neuroscience
- Conduct Disorder
- Depression
- Epidemiology
- Experimental Therapeutics
- Functional Imaging
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- Social Anxiety Disorder

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Principal Investigators: Carolyn Beebe Smith, Alex Martin, Susan E. Swedo
Affiliated Groups: Laboratory of Brain And Cognition, Pediatric and Developmental

Fellowship Information is Difficult to Find

Information is not written for potential research fellows

The only information about fellowship placement is located within the Office of Fellowship Training, which is located under the Information for Staff section.

This page does not aid students in understanding which type of program would be best suited for their situation.

The screenshot shows the NIMH website header with the logo and navigation tabs: DIRP HOME, ABOUT DIRP, RESEARCH, CORE FACILITIES, and INFORMATION FOR STAFF. The main content area is titled "Office of Fellowship Training - Overview" and contains text about the NIMH Intramural Fellowship Training Program. A red line on the left side of the page points to the "Office of Fellowship Training" section. The right side of the page features several vertical lists of links, including "Office of Fellowship Training", "Information for Staff", and "About the DIRP".

Office of Fellowship Training - Overview

The NIMH Intramural Fellowship Training Program located in the Office of the Director (OD), is headed by Barry B. Kaplan, PhD., Director for Fellowship Training. Dr. Kaplan provides oversight and development of Intramural Research Program's integrated multidisciplinary fellowship training program, and provides administrative support and resources for all training-related activities.

To obtain additional information on training opportunities at DIRP, please contact **Barry B. Kaplan, PhD** at the Office of Fellowship Training, National Institute of Mental Health, NIH Clinical Center, Room 4A-15, 10 Center Drive [MSC 1345], Bethesda, Maryland 20892-1345 or by phone at (301) 451-4512. Thank you!

Office of Fellowship Training

- OFT Staff
- Fellowship Placement
- Fellowship Openings
- Training Activities
- Career Mentoring
- Alumni

Information for Staff

- Office of the Scientific Director
- Office of the Clinical Director
- Office of Fellowship Training
- Office of Technology Transfer
- Administrative Services Branch
- Administrative Services

About the DIRP

- Office of the Scientific Director
- Site Map
- Participate in Research
- Contact Us
- Careers in Research
- What's New

The Prototype Guides Users to Opportunities

Participants easily found information for potential fellows and trainees

Participants quickly noticed the featured content on the home page and the link to fellowship and trainee information in the primary navigation.

Participants liked that the website guided them through the steps of finding programs that would be most applicable to them. **Note: The business data does not currently exist in IRP to support this functionality.**

Opportunities for improvement

In addition to finding programs by education status, participants also wanted to browse by research area.

Finding Programs That I am Eligible For

To determine which NIMH DIRP research training programs you are eligible for, please answer the following questions using information concerning your current educational and citizenship status.

I am currently a:

- High School Student
- Undergraduate Student (B.S., B.A.)
- College Graduate (I received a bachelor's degree)
- Master's Student (M.S., M.A.)
- Pre-Doctoral Student (Ph.D., M.D.)
- Recent Post-Doctorate (Ph.D, M.D. within 2 years)
- Post-Doctorate (Ph.D, M.D. over 2 years ago)

Next

Clinical Trials Are Not Easy to Find

Participants did not immediately notice a way to access clinical trials

Participants often scanned the home page looking for the term “clinical trials”, and were uncertain where to go to find this information. During the task, most eventually found a link to Participate in Research.

They were initially disoriented by arriving at a different website with a very different navigation structure and look and feel.

Some participants did not initially notice the list of clinical trial categories because they are located at the bottom of the page.

The screenshot shows the homepage of the Division of Intramural Research Programs (DIRP) at the National Institute of Mental Health (NIMH). The page features a header with the NIMH logo and the text "National Institutes of Health" and "Division of Intramural Research Programs (DIRP)". A search bar is located in the top right corner. Below the header, the main heading reads "Patient Recruitment for Studies Conducted by the NIMH, NIH". A navigation breadcrumb trail shows "NIMH Home > Intramural Research > Patient Recruitment".

The main content area includes a welcome message: "Welcome to the NIMH at the Clinical Center". Below this, a paragraph states: "The staff of the National Institute of Mental Health (NIMH) at the National Institutes of Health (NIH) welcomes you to our patient recruitment and information web site. We conduct a large number of research studies with patients who have mental health disorders. Our studies are performed at the NIH Clinical Center (CC), a hospital dedicated to the highest quality research. The NIH CC (picture shown on the right) is located in Bethesda, Maryland, near Washington, D.C." To the right of this text is an image of the NIH Clinical Center building, with the caption "NIH Clinical Center, Bethesda MD".

Below the image, a paragraph explains: "We want to provide you with information about our research and about your disease to help you decide whether to volunteer for participation in one of our studies. If you qualify for a study, then study-related evaluation, treatment and, in some cases, transportation to NIH are provided without cost to you or your health plan." Another paragraph follows: "For details about the studies, choose a category below or type the name of a specific disease in the search box to the right and click the Submit button."

At the bottom of the page, there is a section titled "List of Disease Categories" which is divided into two columns: "Adult Disorders" and "Pediatric Disorders".

- Adult Disorders:**
 - [Anxiety Disorders \(Panic Disorder, Generalized Anxiety Disorder, Social Anxiety Disorder\)](#)
 - [Autism Spectrum Disorders](#)
 - [Bipolar Disorder \(Manic-Depression\)](#)
 - [Depression](#)
- Pediatric Disorders:**
 - [Anxiety Disorders \(Panic Disorder, Generalized Anxiety Disorder, Social Anxiety Disorder, Phobias\)](#)
 - [Attention Deficit Hyperactivity Disorder \(ADHD\)](#)
 - [Autism Spectrum Disorders](#)

A red arrow points to the "Depression" link in the Adult Disorders list.

On the right side of the page, there is a sidebar titled "Search Patient Recruitment Disease Categories" with a search input field and a "Submit" button. Below this, there are links for "NIMH" (Mission Statement, Patient Information) and "NIH" (Mission Statement, Clinical Center, Healthy Volunteers). At the bottom of the sidebar, there are links for "Other Clinical Trials" (All NIMH Sponsored Trials, ClinicalTrials.gov).

The Prototype Makes it Easy to Find Clinical Trials

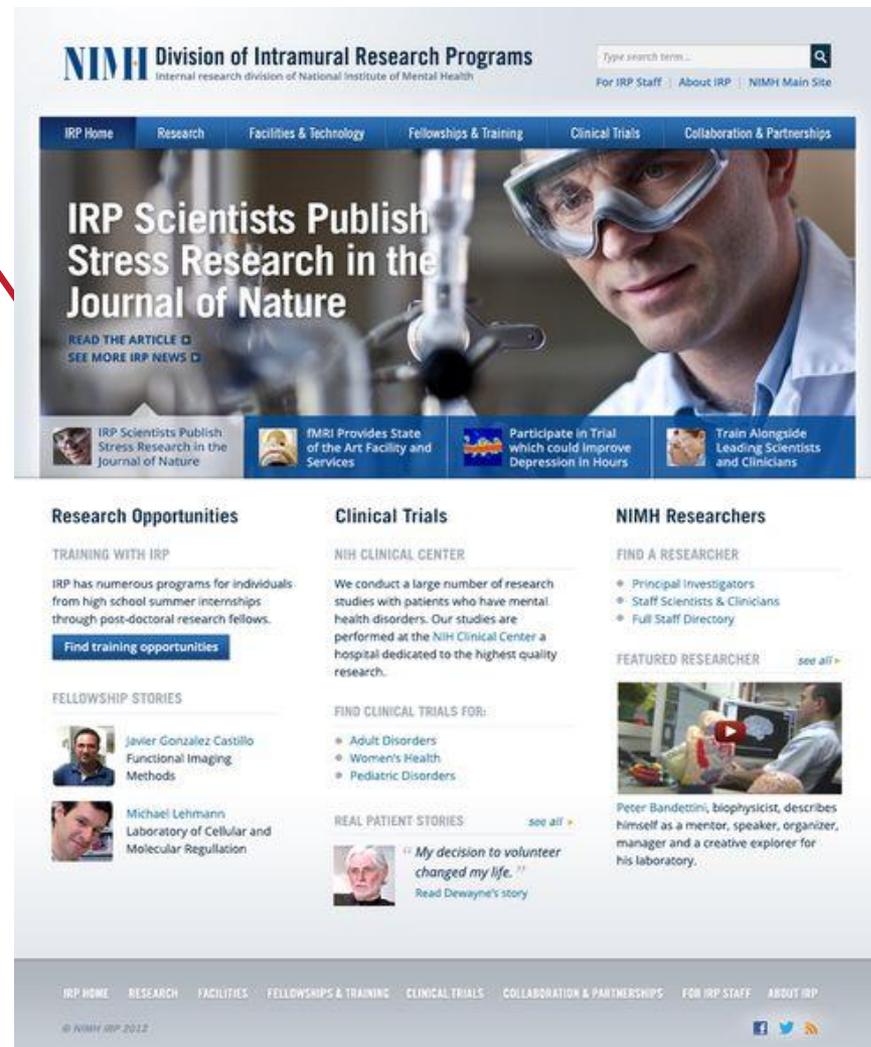
Participants quickly noticed clinical trial information on the home page

Participants were able to locate information about the clinical center as well as where to find current clinical trials.

Participants quickly found this information either by referring to the featured area on the home page or by clicking on Clinical Trials in the primary navigation.

Opportunities for improvement

Integrate the active lists of NIMH clinical trials into the IRP website.



Collaboration Process is Concealed from Users

Participants could not find any information on how to collaborate with NIMH researchers

None of the participants could find out how to collaborate with NIMH researchers, or even to find out if this is possible.

Participants did not expect this information to be under “Information for Staff” and assumed this was for internal personnel only.

The screenshot displays the website for the Division of Intramural Research Programs (DIRP) at the National Institute of Mental Health (NIMH). The header includes the NIMH logo and the tagline "Transforming the understanding and treatment of mental illness through research". The main navigation bar features tabs for "DIRP HOME", "ABOUT DIRP", "RESEARCH", "CORE FACILITIES", and "INFORMATION FOR STAFF".

The "ABOUT DIRP" section contains a detailed description of the division's research focus, including behavioral, systems, cellular, and molecular levels, and lists major disease entities studied. A "CAREERS AT NIMH IN INTRAMURAL RESEARCH" banner is prominently displayed in the center.

The "RESEARCH" section lists various opportunities: "Office of the Scientific Director", "Site Map", "Participate in Research", "Contact Us", "Careers in Research", and "What's New". A "Research at DIRP" sub-section lists "Principal Investigators", "Scientists & Clinicians", "DIRP Labs and Branches", and "DIRP Research Areas".

The "CORE FACILITIES" section lists several specialized units: "Functional MRI Core", "Magnetic Resonance Core", "Magnetoencephalography Core", "Microarray Core", "Neurophysiology Imaging Facility", "Scientific and Statistical Computing Core", "Section on Instrumentation", "Transgenic Core", and "Veterinary Medicine Resources (Staff only)".

The "INFORMATION FOR STAFF" section lists internal roles and services: "Office of the Scientific Director", "Office of the Clinical Director", "Office of Fellowship Training", "Office of Technology Transfer", "Administrative Services Branch", and "Administrative Services".

A "PARTICIPATE IN RESEARCH" banner at the bottom right features an aerial view of the NIMH campus and the text "Learn how to be part of a NIMH Research Project".

At the bottom of the page, there is a footer with a date update ("This page was last updated August 29, 2012."), a navigation menu for "Site Map", "Staff Directories", "Contact NIMH DIRP", "Employment Opportunities", "Privacy Notice", "Policies", "FOIA", and "Accessibility", and a disclaimer: "The Division of Intramural Research Programs is within the National Institute of Mental Health (NIMH) is a part the National Institutes of Health (NIH), is a component of the U.S. Department of Health and Human Services." Logos for the NIMH and USA.gov are also present.

Collaborations are Promoted & Encouraged

Participants easily found information about potential collaborations

Participants easily found the link in the primary navigation to Collaborations & Partnerships and were pleased that this information was being promoted.

They found detailed information about the collaboration process and were impressed with a description of a current collaboration with an outside institution.

The screenshot displays the NIMH website's 'Collaboration & Partnerships' page. At the top, the NIMH logo and 'Division of Intramural Research Programs' are visible, along with a search bar and navigation links for 'For IRP Staff', 'About IRP', and 'NIMH Main Site'. A dark blue navigation bar contains links for 'IRP Home', 'Research', 'Facilities', 'Fellowships & Training', 'Clinical Trials', and 'Collaboration & Partnerships'. Below this, a breadcrumb trail reads 'IRP Home / Collaboration & Partnerships'. A vertical sidebar on the left lists menu items: 'Collaboration & Partnerships', 'Collaboration Opportunities', 'Current Partnerships', 'Licensing', 'Cooperative and Development', 'Research Agreements (CRADA)', 'Material Transfer Agreement (MTA)', and 'Small Business Innovative Research (SBIR)'. The main content area features a 'Collaboration & Partnerships' heading, followed by a sub-heading 'Collaborating with an NIH investigator' and a photograph of two people in lab coats. Text explains that collaborations must be documented in writing and lists various agreement types. A link to 'Learn more about collaboration opportunities' is provided. Below this is a section for 'Current Collaborations' with a photograph of a lab tray and text describing the Center for Collaborative Genomic Studies on Mental Disorders. The final section, 'Opportunities for Collaborative Research at the NIH Clinical Center', includes a photograph of the building and text stating that extramural investigators can establish collaborations with NIH intramural investigators.

Content

Information that users need

The Pages are Not Skimmable

Participants often did not take the time to read the paragraphs of text

Participants often failed to gain an understanding of the content because they were discouraged by the amount of text that they were required to read.

Participants reported that there was a lot of “fluff” content that did not help them and made the pages appear wordy.

NATIONAL INSTITUTES OF HEALTH
NIMH National Institute of Mental Health
Transforming the understanding and treatment of mental illness through research

DIVISION OF INTRAMURAL RESEARCH PROGRAMS

DIRP HOME ABOUT DIRP RESEARCH CORE FACILITIES INFORMATION FOR STAFF

Division of Intramural Research Programs - What's New

Making its debut The new website for the National Institutes of Health/Karolinska Institutet Doctoral Program in Neuroscience has been launched. The website (<http://dirp.nimh.nih.gov/kinhi/>) was designed as a recruitment tool for prospective students as well as a resource for current students. The goal of this program is to collaboratively train future leaders in neuroscience research by combining the substantial resources of these two leading institutions. The application deadline for next fall is January 3, 2012.

School is back in session! Special interest groups and seminar series resume

The **Drosophila Neurobiology Interest Group**, which is a consortium of NIH labs which use the powerful molecular tools available in fruit flies to address questions related to nervous system development, degeneration and function. The group hosts a biweekly Drosophila Neuroscience Colloquium on Fridays at noon (location varies), which features informal seminars on current research projects and formal presentations from outside speakers. Discussions are continued over lunch in the Bldg 35 cafeteria. Please see the group's website at <http://nigs.nih.gov/DNIG/Pages/default.aspx> or contact Ben White for more details.

The **Human Genetics Journal Club** meets once a month usually at noon on Tuesdays in 3S-1A8.1000. Please contact Francis McMahon for more details and to get on the mailing list.

The **Neurobiology Interest Group** seeks to promote interaction between the institutes and laboratories pursuing diverse approaches to the study of the nervous system. Areas of research interest include structural, molecular, cellular, developmental and systems neuroscience. The group meets most Fridays at 4 pm, please see <http://nigs.nih.gov/neurobiology/Pages/default.aspx> for more details. Of note, September's seminars include talks by Jason Snyder in Heather Cameron's lab on Sept 2 and Cibu Thomas in Chris Baker's lab on Sept 3.

The **Synaptic and Developmental Plasticity Interest Group** brings together neuroscientists representing such diverse areas as electrophysiology, systems neuroscience, and molecular and cell biology. The group sponsors the Synaptic Integration Seminar Series, organized by postdoctoral fellows from NICHD, NICDA, and NICDC. Seminars are held on Tuesday or Wednesday at 11am, followed by pizza and engaging conversation with the speakers. For more information go to <http://nigs.nih.gov/dirp/Pages/default.aspx>.

Funding opportunities

The **Brain and Behavior Research Fund** (formally NARSAD) is a not-for-profit organization whose goal is to increase private funding of highly innovative research and to nurture the development of scientific talent. The NARSAD Young Investigator Grant provides support for the most promising young scientists conducting neurobiological research. One and two year awards up to \$30,000 per year are provided to enable promising research fellowships training of begin careers as independent research faculty. Research projects can be either basic or clinical but must be relevant to serious psychiatric disorders such as schizophrenia, mood disorders, anxiety disorders, or child and adolescent psychiatric disorders. The **2012 Young Investigator Award** information and application can be found at http://www.narsad.org/?module=24&app=for_grants&for_grants=124. Applications must be received by **September 15, 2011**. Typically, the application must include additional forms and several signatures; please email Margarita Valencia for more details.

Genome-wide high-throughput RNAi screens

The Clinical Center has released the FY 2012 call for **Bench-to-Bedside Proposals**. These two-year awards are designed to seed new projects that proceed to translatable basic science to human subjects. Bench-to-bedside proposals can fall into one of six categories: behavioral and social sciences, rare diseases, AIDS, missing health and health disparities, women's health, and general projects. Although projects can be exclusively among intramural investigators, collaborations between intramural and external investigators are encouraged. The intramural investigator must have a current NIH grant related closely to the general subject of the bench-to-bedside proposal to receive bench-to-bedside funds. External investigators are also invited to initiate proposals and serve as project leaders with an intramural partner. The intramural partner will be responsible for coordination of all aspects of proposal submissions. The Bench-to-Bedside Program uses an electronic review process. Contact us at bench2bedside@nhi.gov or by email to Bench2Bedside@mail.nih.gov or on YouTube at http://www.youtube.com/user/NIMHClinicalCenter?feature=channel_videos.

Genome-wide high-throughput RNAi screens

The Office of Intramural Research is pleased to announce the FY 2012 NIH Director's Challenge Innovation Awards program. The program provides seed money to stimulate innovative, high-impact research and promotes collaborative interactions among NIH intramural investigators.

For FY 2012, the program will have two application cycles. We are now requesting applications for one-year proposals that utilize genome-wide high-throughput RNAi screens. These screens will be conducted in collaboration with the Trans-NIH RNAi Facility, which is a component of the NIH Chemical Genomics Center. A second call for proposals, that will emphasize other research areas, will be announced at a later date. **Letters of Intent for RNAi proposals are due on Friday, September 23, and full proposals will be due on Friday, October 20** (note <http://nhi.gov/central/atum.cfm>). For more information, go to the program's website at <http://nigs.nih.gov/challenge> or contact Dr. Chuck Caspard, Assistant Director for Intramural Research, at ccaspa@dirp.nih.gov.

Clinical applications of stem cells

The NIH Center for Regenerative Medicine (NIH CRM) Award Program announces its FY 2012 request for applications (RFA). This is the 3rd cycle of funding for these awards, which are designed to seed new projects that propose to clinically translate stem cell technology. The goal is to support projects that accelerate clinical applications of adult and pluripotent stem cells, and/or initiate new approaches for the use of stem cells in the clinic. The following three project types will be considered:

- Engineering adult stem cells or pluripotent stem cells to correct a genetic defect that could potentially be used in a clinical therapy.
- Screening with induced pluripotent stem cells (iPSCs) or their differentiated cells for therapeutic applications.
- Development of cells for therapeutic purposes.

Applicants may request funds for one or two years, with a maximum of \$250,000 total. The application process includes the submission of two sets of material. First, a **Letter of Intent (LOI)** is due **September 23**, which is a succinct summary of the project and its significance. The appropriate Scientific Director and the Director of the NIH CRM will review each LOI, and the applicant will be notified by email whether it has been approved for submission of a full application. Investigators who receive LOI approval can submit **full application by midnight on Friday, October 20**. Details of the LOI and full application submission process are contained in the attached RFA. All submissions will be made using <http://nhi.gov/central/atum.cfm>. For questions or concerns, please contact Scott.

SEARCH THIS SITE

Office of the Director
Site Map
Participate in Research
Contact Us
Careers in Research
What's New

Research in DIRP
Principal Investigators
Scientists & Clinicians
DIRP Labs and Branches
DIRP Research Areas

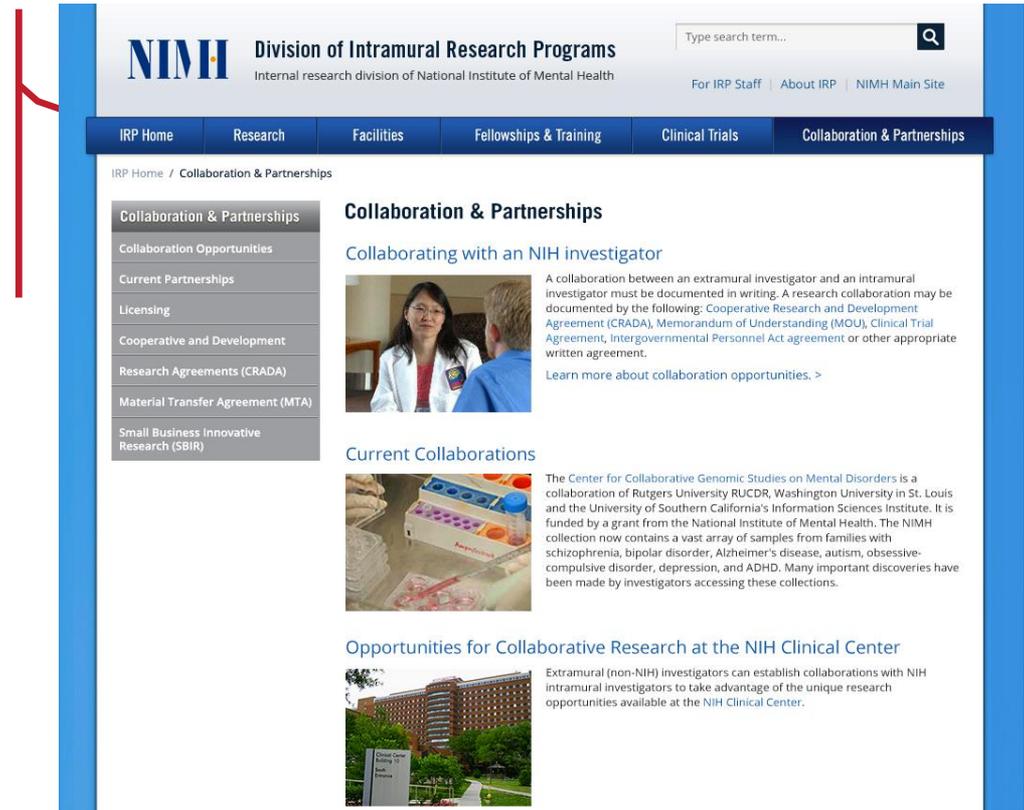
Care Facilities
Functional MRI Core
Magnetic Resonance Core
Magnetoelectrophysiology Core
Microarray Core
Neurophysiology Imaging Facility
Scientific and Statistical Computing Core
Section on Instrumentation Core
Transgenic Core
Veterinary Medicine Resources (Staff only)

Information for Staff
Office of the Scientific Director
Office of the Clinical Director
Office of Fellowship Training
Office of Technology Transfer
Administrative Services Branch
Administrative Services

The Prototype Pages are More Engaging

Participants found page content engaging and easy to read

Participants said that the photography and concise text encouraged them to engage with the content.



Limited Research Information

Participants were dissatisfied with the research information that they found

Participants were expecting each research area to have a dedicated page with information about latest research, but instead had to extract this information from PI bio pages.

The screenshot shows a website page for Principal Investigators. The navigation bar at the top includes: DIRP HOME, ABOUT DIRP, RESEARCH, CORE FACILITIES, and INFORMATION FOR STAFF. The main heading is "Principal Investigators". Below this, there is a profile for Alex Martin, Ph.D., which includes a photo and a detailed biography. To the right of the bio, there are several vertical navigation menus: "Research at DIRP" (with links for Principal Investigators, Scientists & Clinicians, DIRP Labs and Branches, and DIRP Research Areas), "About the DIRP" (with links for Office of the Scientific Director, Site Map, Participate in Research, Contact Us, Careers in Research, and What's New), and "Core Facilities" (with links for Functional MRI Core, Magnetic Resonance Core, Magnetoencephalography Core, Microarray Core, Neurophysiology Imaging Facility, and Scientific and Statistical Computing Core).

The Prototype Promotes Research

Participants were able to get a quick overview of the research activities

Participants liked that each research topic had a dedicated page that highlighted the research projects, opportunities for fellowships, and related clinical trials. **Note: Developing and maintaining pages for each IRP area of research will require a staff resource whose primary focus is IRP communications.**



Integration Strategy



A seamless integration of the NIMH Public & IRP Content

Micro Sites Lack Association with NIMH

Current IRP micro sites (aka The Wild West)



Unifying Content Under One Design

All labs, programs, branches, etc. should be seamlessly integrated into the new design

Users will experience content across all aspects of IRP with a consistent and visually-appealing design. This will add to the credibility of the organization as a whole, as well as each individual program.

Principal investigators and program directors will have a dedicated home for their content and will still maintain the freedom to include information about their research, publications, training opportunities and open research studies.

The screenshot shows the NIMH Division of Intramural Research Programs website. The header includes the NIMH logo, the division name, and a search bar. A navigation bar contains links for IRP Home, Research, Facilities, Fellowships & Training, Clinical Trials, and Collaboration & Partnerships. The main content area is titled 'Child & Adolescent Psychiatry' and features a sidebar with navigation options: Research Projects, Principal Investigators, Fellowship Opportunities, Clinical Trials, and Back to Research Topics. The main content includes a photo of a woman and a child, a description of research on childhood psychiatric disorders, a list of Principal Investigators (Judith L. Rapoport and Jay Giedd), a section on Research Projects (Neuregulin 1 and GAD1), Fellowship Opportunities, Affiliated Groups, and Clinical Trials & Ongoing Studies.

Revise the Information Architecture

Revise the NIMH Public Website IA to incorporate IRP under the heading “Research at NIMH”.



The screenshot shows a navigation menu with two rows. The top row has a blue background and contains the following items: Home, Health & Education, Outreach, Research & Funding, Research at NIMH, Clinical Trials, About NIMH, and News. The 'Research at NIMH' item is highlighted in green. The bottom row has a green background and contains: IRP Overview, NIMH Researchers, Our Research, Fellowships & Training, and Collaborations & Partnerships.

[For IRP Staff](#) | [About IRP](#) | [Contact IRP](#)

Changes reflected above

NIMH Public Site:

- Added Clinical Trials to the primary navigation
- Added a link to the IRP called “Research at NIMH”

IRP navigation:

- Removed the navigation link to Clinical Trials
- Relocated “Core Services” to a sub category under “Our Research”
- Promoted “NIMH Researchers” category

Revise and Augment Labs & Programs Content

Create new content

Many programs do not yet have a web presence.

Re-write for the Web

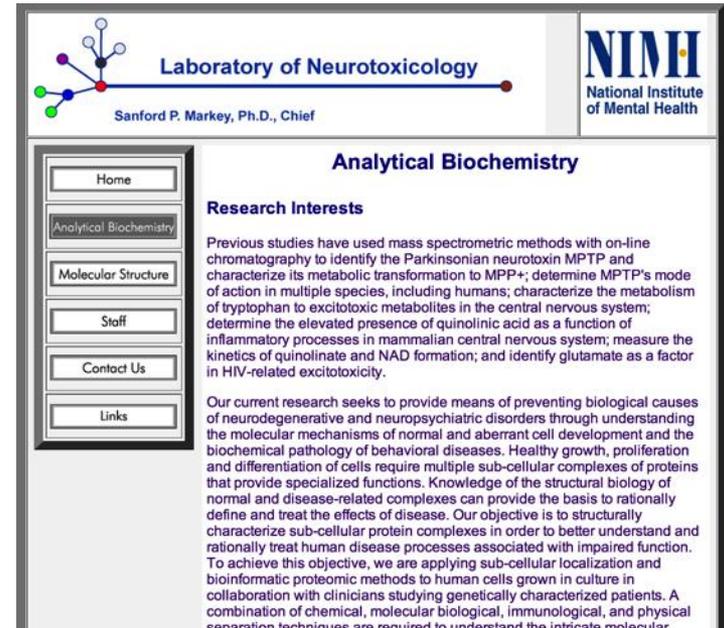
Content needs to be re-written to order to be easily skimmed.

Include multimedia

Incorporate photos and graphics related to the research topic.

Integrate content into new site template

Programs should adopt the new consistent look and feel including the new navigation scheme.



Thank you

SPARK Experience Design

www.sparkexperience.com

51 Monroe Street

Suite 1601

Rockville, MD 20850

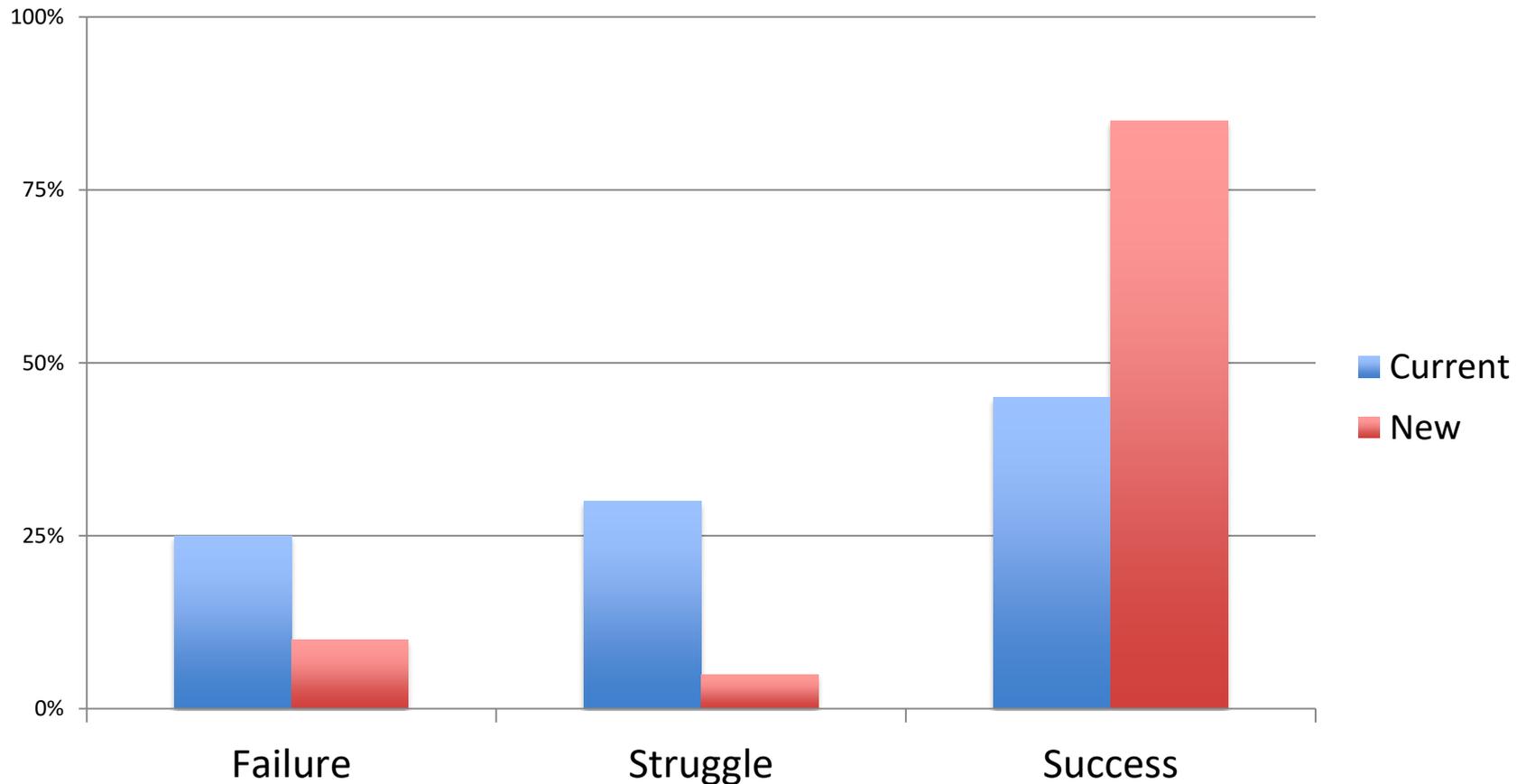


Appendix

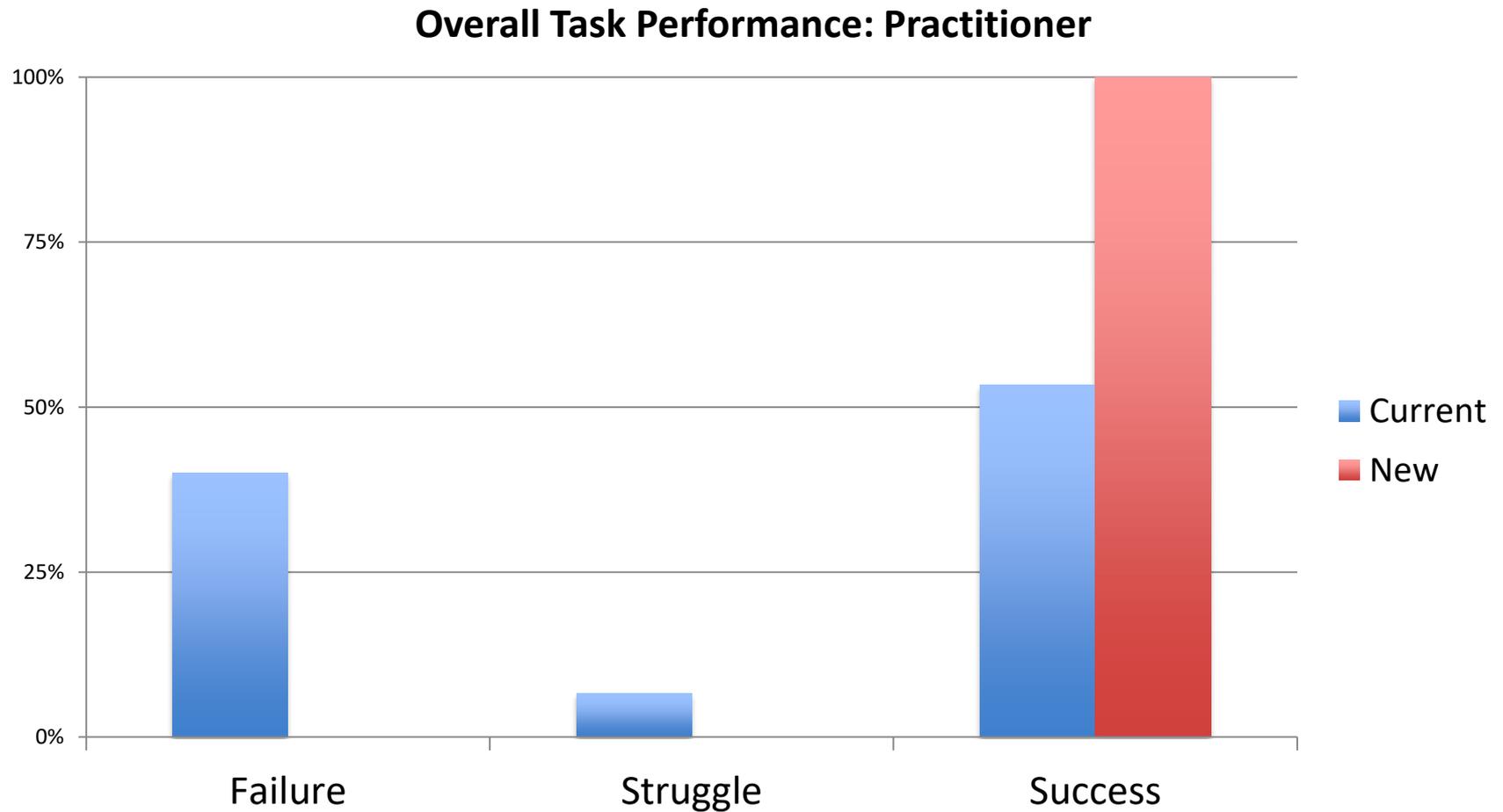


Task Performance by Audience: Student

Overall Task Performance: Student

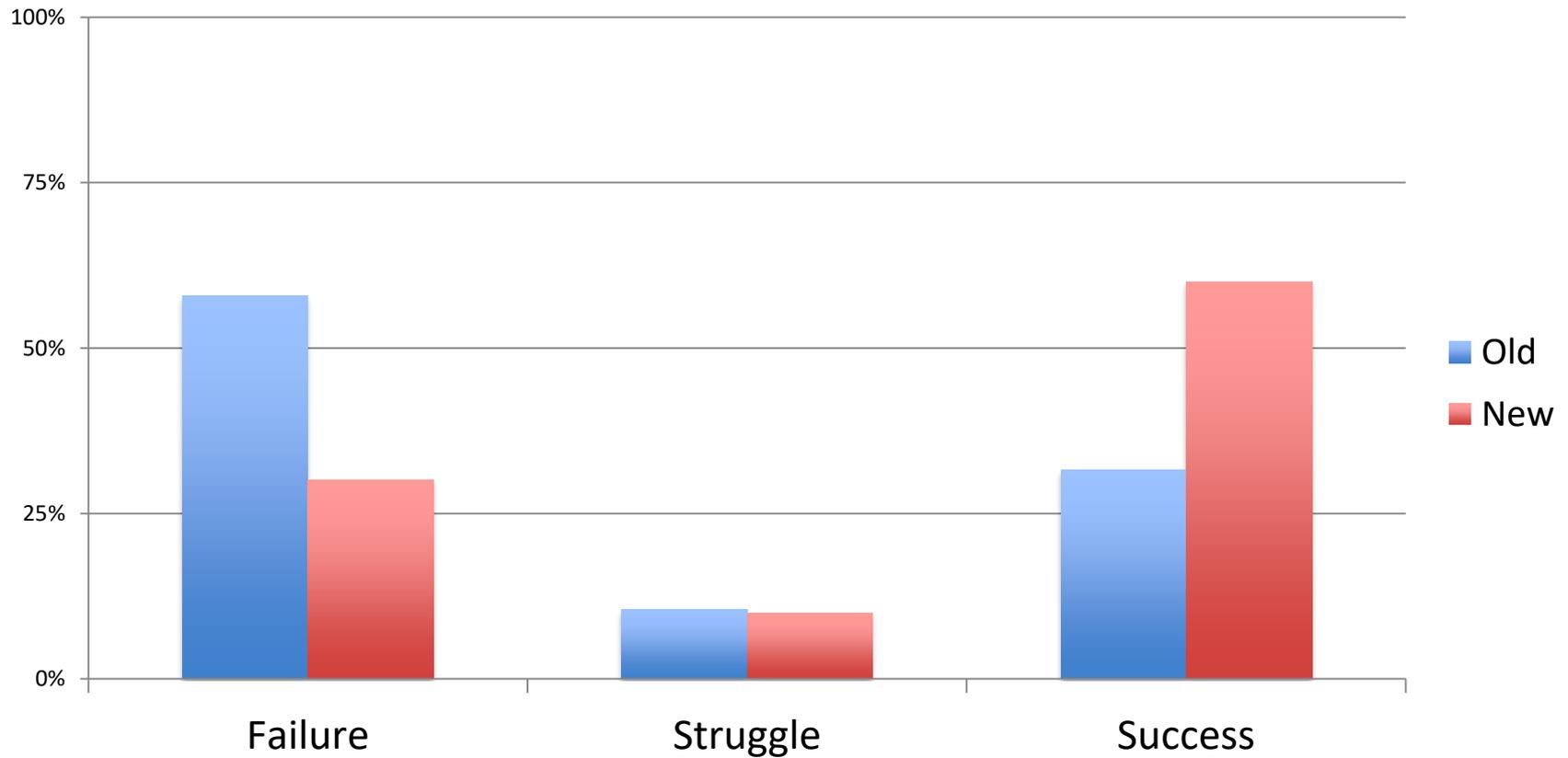


Task Performance by Audience: Practitioner



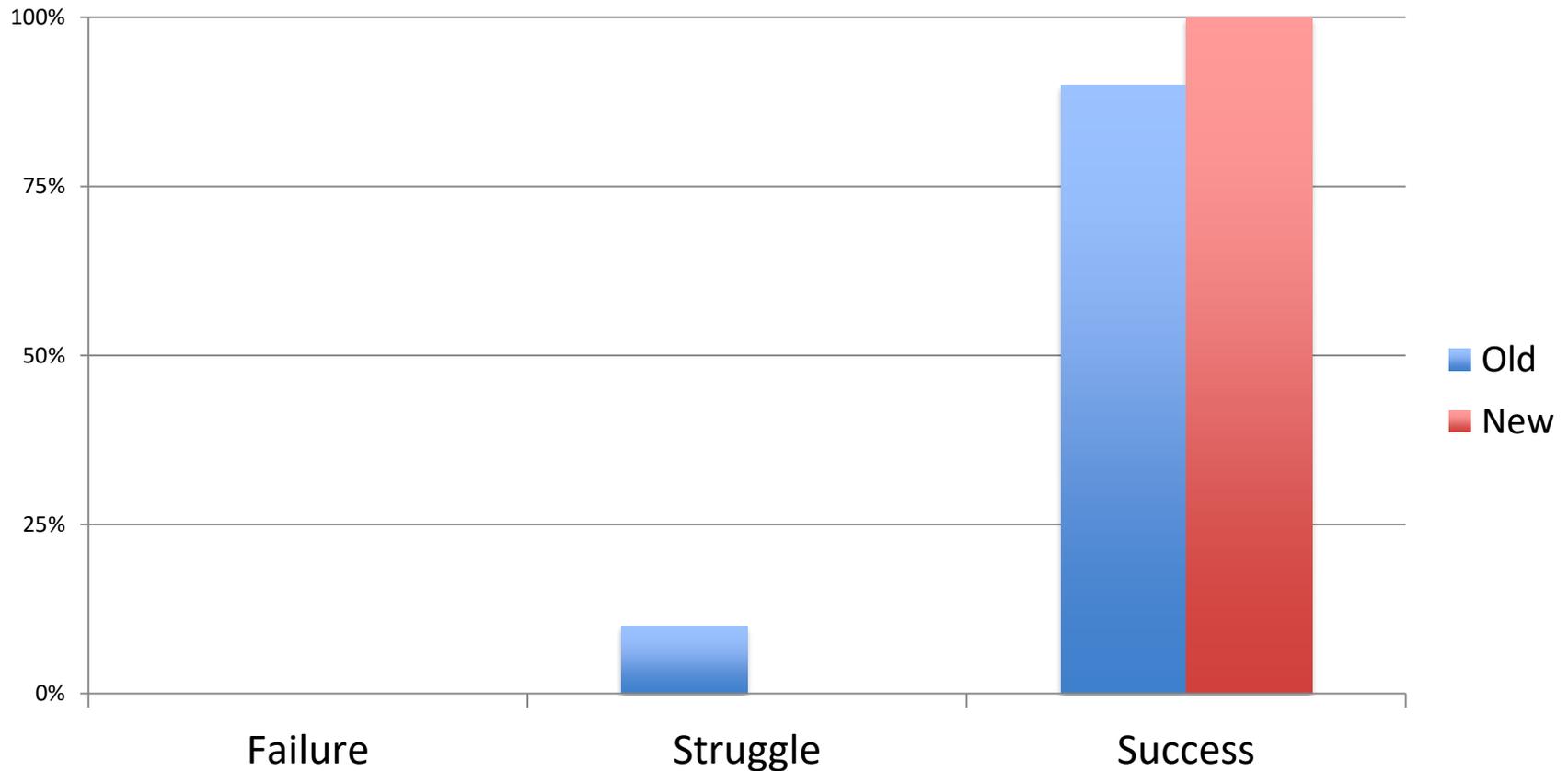
Task Performance by Audience: General Public

Overall Task Performance: General Public



Task Performance by Audience: Faculty

Overall Task Performance: Faculty



Post Experience Responses

All Post Experience Responses

