

# AAMC GIA Awards for Excellence Competition 2015

Category: 2B: Electronic Communications: Websites

Title: Duke School of Medicine Web Design and Development Framework

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## Summary

The School of Medicine faced an urgent need to update nearly all of the Web sites for the School, its major offices and programs, and its 22 departments. But without central support or guidance, School communicators collaborated to devise a framework for efficient, cost-effective Web development across the School. This project resulted in a free toolset, available to any School department or unit. It has successfully enhanced the School of Medicine brand and dramatically improved how we are able to reflect the vibrant research, clinical care and medical education activities of our faculty, trainees and students.

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## Problem

In Spring 2013, the School of Medicine received notification from Duke Health Technology Services (DHTS), the Duke health system's IT organization, that it would no longer provide Web development services for the School of Medicine. At the same time, Duke Medicine Office of Creative Services was reorganized and also would not provide design support to the School. These developments left the School and its units without any guidance, tools or staff to develop or maintain its nearly 150 Web sites.

In addition, DHTS informed the School that 30 of the School's sites using XOOPS, an outdated content management system (CMS), would shortly be out of compliance with server security protocols. Meanwhile, the remainder of the School's sites, many using an older version of the Drupal CMS, would need to be upgraded within five years to remain in compliance.

Reviewing all the sites that fell under the School of Medicine, we also identified other problems:

- Sites had inconsistent branding and design, displaying a variety of logos and icons. Some sites did not identify that they were in the School or even at Duke University.
- Many sites were based on static content templates and presented major CMS and design limitations: poor navigation, difficulty in featuring images or videos, and a restricted flow of current news (including permalink pages for each news item). For example, when Dr. Robert Lefkowitz won the Nobel Prize for Chemistry in October 2012, we had no good or exciting way to feature the honor on departmental or School sites.
- Many sites clearly should have been part of larger sites. For example, the Department of Medicine had 18 standalone sites for its missions, divisions and programs, and the School itself had a variety of administrative offices with separate sites, including Admissions.

All of this meant that Web visitors — including our own faculty, staff and learners — found it difficult to locate information within the sprawl of our sites. And, visitors weren't getting a good picture of the current activities and strengths of the people in the School of Medicine, especially as our School has become more interdisciplinary and full of team science.

While DHTS would continue to serve as secure Web host for our sites, the lack of central support for Web strategy and development was an important problem to solve. The School has a central office of communications with two full-time staff. However, there are more than 50 communicators, Web managers, and communications liaisons in individual departments and units. They have separate budgets, report to their respective chairs or directors, and are expected to provide local leadership and strategy implementation. We were afraid that each of them was about to set off on complex, expensive Web redesign projects with no branding alignment, while units without a communicator would have no course for improving their sites.

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## Solution/Strategy

The School of Medicine central office of communications and the Department of Medicine communications office proposed a project to collaboratively develop guidelines and tools for Web development and brand alignment that could be used across the School to upgrade the legacy XOOPS and outdated Drupal sites, as well as serve as a blueprint for future upgrades. This plan got enthusiastic approval and support from Nancy Andrews, MD, PhD, dean of the School of Medicine, and Mary Klotman, MD, chair of the Department of Medicine.

It was essential to include DHTS and the Duke Office of Procurement in this partnership. These groups would help us ensure that new sites would be secure and functional and able to be hosted on DHTS servers, while also providing needed financial and technical oversight of work by third-party vendors.

### Our goals:

1. Develop a process for upgrading a Web site in an efficient, cost-effective and user-friendly way, especially for entities without dedicated staff or Web development support.
2. Apply Web design trends and standards in order to make sites mobile friendly and responsive, and to reflect better and consistent use of colors, media, fonts and branding elements across all School sites.
3. Increase the accuracy and utility of search results on each site, and increase search engine optimization for Duke-related searches.
4. Facilitate a 'river of news' approach to increase the number of news items, blog posts and featured profiles that better reflect the activities and accomplishments of our institution.

### Our plan:

1. Create a School of Medicine style guide to refresh design elements and influence brand consistency.
2. Design a comprehensive, best-in-class Web template in the open-source Drupal CMS (using version 7, the current production version), for departments and major units to consolidate their subsidiary units under one site.
3. Allow the template to capitalize on existing University information systems, including Scholars@Duke, the University's recently developed faculty-profile system, and the University's central events calendar, Events@Duke.
4. Apply this new framework to the School of Medicine and the Department of Medicine sites, and simultaneously persuade other departments to follow suit.

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## Measurements

This is what we accomplished, and how that's resulted in a highly successful project:

1. We selected a vendor, Coalmarch Productions, to design the style guide and then apply the new branding elements and themes in the development of a Drupal 7 template.
2. We completed the style guide, as well as a brand bar for temporary use to give sites a common design element, in July 2014.
3. Under our direction, Coalmarch developed the Drupal template, allowing a department to incorporate its divisions, training programs, faculty labs and profiles, news blogs, research highlights, and calendars. The template integrates Scholars@Duke, Events@Duke, and the Duke Alert system. It allows subunits a fully functional home page within the larger school or department site, with navigation that mimics an independent site.
4. The template is fully compliant with DHTS security requirements and is available for free to all School of Medicine entities. Because the template is free, easy to use, and reduces costs of Web development projects by up to 50%, departments and units have eagerly used the template. No mandate by the School of Medicine has been needed.
5. The Duke Office of Information Technology created a complementary WordPress template for entities that do not need the complex functionality of a full Drupal site. This free template has the same look and feel as the Drupal template, is customizable, and will soon be able to integrate Scholars@Duke faculty profiles.
6. While free, the Drupal template requires back-end development work from a third-party (often external) developer. We developed step-by-step guidelines, sample RFPs, and a list of vetted third-party vendors, and the School of Medicine communications team provides consultation services to all School units.
7. We organized an internal wiki, with a checklist of recommended planning and development steps, and a listing of current and projected Web development projects across the School. The wiki tracks each project and allows colleagues to share best practices.
8. The Department of Medicine launched its new comprehensive site on June 1, 2015. An integrated MedicineNews blog and improved faculty profiles have resulted in increased Web traffic, especially longer on-site times for internal visitors. The Internal Medicine Residency Program reports increased recruitment interest because of the new resident profiles.
9. The School of Medicine launched its new site on June 30, 2015. It provides better navigation to department sites, and incorporates seven previous standalone administrative and programmatic sites, with other administrative offices migrating soon.
10. Nine additional School of Medicine units have launched sites using the template or following the design framework (see Addendum)
11. Nine units are in planning or development stages of using the framework (see Addendum)

### Coda:

On October 7, 2015, when Paul Modrich, PhD, professor of biochemistry, was selected to receive the Nobel Prize in Chemistry, the exciting news was quickly reflected on the Biochemistry, School of Medicine, Department of Medicine and other sites.

## Addendum

### Links:

- Style guide: <https://medschool.duke.edu/about-us/news-and-communications/communications-resources/branding-identity/style-guide>
- Brand bar: <https://medschool.duke.edu/about-us/news-and-communications/web-development/school-medicine-brand-bar>
- School of Medicine Web development templates: <https://medschool.duke.edu/about-us/news-and-communications/communications-resources/web-development>
- Building a Drupal Site: <https://medschool.duke.edu/about-us/news-and-communications/web-development/building-drupal-site>
- Drupal Web Site Prototype: <https://medschool.duke.edu/about-us/news-and-communications/web-development/building-drupal-site/drupal-prototype>
- Building a WordPress Site: <https://medschool.duke.edu/about-us/news-and-communications/web-development/building-wordpress-site>
- Department of Medicine: <https://medicine.duke.edu>
- School of Medicine: <http://medschool.duke.edu>

### **Additional School of Medicine units that have launched sites in 2015 using one of the templates or following the design framework:**

- Department of Biochemistry, <http://www.biochem.duke.edu>
- Department of Molecular Genetics & Microbiology, <https://mgm.duke.edu/>
- Department of Neurobiology, <http://www.neuro.duke.edu/>
- Department of Ophthalmology, <http://dukeeyecenter.duke.edu/>
- Department of Orthopaedic Surgery, <https://ortho.duke.edu/>
- Duke AHEAD, <https://dukeahead.duke.edu/>
- Duke Center for Autism and Brain Development, <http://autismcenter.duke.edu/>
- Duke Institutional Review Board, <http://irb.duhs.duke.edu/>
- Duke Translational Medical Institute, <https://www.dtmi.duke.edu/>

### **Sites currently in planning or development stages of using the framework:**

- Department of Biostatistics & Bioinformatics
- Department of Dermatology
- Department of Immunology
- Department of Neurology
- Department of Neurosurgery
- Department of Pathology
- Department of Pediatrics
- Department of Surgery
- Center for Applied Genomics and Precision Medicine

SCHOOL OF MEDICINE (OLD) HOME PAGE, 6/01/2015

The screenshot shows the Duke University School of Medicine website home page. At the top, there is a search bar and the site title "Duke University School of Medicine". A navigation menu includes "About Us", "Education", "Research", "Patient Care", "Faculty", "Alumni and Friends", and "Communications". The main content area features a large banner for the Class of 2015 graduation, with a text box stating "Congratulations to the Class of 2015! 346 students in the Duke University School of Medicine graduated on May 9, 2015." Below this is a "Top News" section with three articles: "Nearly 1 in 10 Adults Has Impulsive Anger Issues and Access To Guns", "Duke Research Teams Win Large Federal Grants for HIV Vaccine Studies", and "ER Patients Discharged After Kidney Stone Evaluation Likely to Return". To the right is a "Quick Links" sidebar with dropdown menus for "Education Programs", "Academic Departments", and "Centers & Institutes", along with social media links and buttons for "Scholars@Duke Faculty Directory" and "MedSchoolBlog". The "School Highlights" section contains four featured stories with images and "read more" links. The footer lists various departments and offices under the categories "About Us", "Education", "Research", and "Faculty".


SCHOOL OF MEDICINE (NEW) HOME PAGE, 10/15/2015

Med School Blog Faculty Directory Contact Us

**Duke University School of Medicine**

Search

About Us Education Research Patient Services Academic Departments Centers and Institutes



**Congratulations Dr. Paul Modrich, Recipient of 2015 Nobel Prize in Chemistry**


[Read More](#)

**Welcome to the Duke University School of Medicine!**

- Degree Programs & Admissions
- Student Services
- Faculty Resources
- Support the School

**Duke Surgery and Durham Nativty School Partner to Train Future Surgeons**


Students participated in a unique, hands-on surgical skills workshop as part of a new educational outreach program led by the Duke Department of Surgery.



[Read More](#)

**A Conversation with Dr. Michael Krangel**


A casual interview with Dr. Michael Krangel, Professor of Immunology and Chair of the Department of Immunology.



[Read More](#)

**Duke Launches Autism Research App**


The app is intended to test the reliability of smart phone questionnaires and video analysis of facial expressions as a possible screening tool for autism and other developmental disorders of children.



[Read More](#)

**Recent News**

**PRESS RELEASE**




**Cleaning Hospital Rooms With Chemicals, UV Rays Cuts Superbug Transmissions**

October 13, 2015

Healthcare facilities continue to battle drug-resistant organisms such as methicillin-resistant Staphylococcus aureus (MRSA) that linger on surfaces...

**BLOG POST**




**Breaking Down the Silos of Business, Informatics, and Healthcare**

October 12, 2015

MMAC is a one-year program that began in 2008 within Duke's Fuqua School of Business. Three years ago, the program moved to the School of Medicine...

**PRESS RELEASE**




**Duke Establishes First Hand Transplant Program in North Carolina**

October 5, 2015

Duke Medicine has launched the first hand transplant program in North Carolina, becoming one of a small number of transplant centers in the country...

**BLOG POST**



**Eda Yildirim: Solving for X, the Chromosome**

October 6, 2015

Eda Yildirim, PhD, a new faculty member in the medical school's department of cell biology, is among a growing movement of Duke scientists trying to...

**Upcoming Events**

**EVENT**

2015 Duke-Industry Statistical Symposium

October 22, 2015 - 8:00am

Trent Semans Center for Health Education - Great Hall

**EVENT**

2015 Duke-Industry Statistical Symposium

October 23, 2015 - 8:00am

Trent Semans Center for Health Education - Great Hall

**EVENT**

2015 AAAC Meeting: Alumni and Friends Reception in Baltimore

November 7, 2015 - 6:00pm

Hilton Baltimore


**EVENT**

Medical Alumni Weekend 2015

November 12, 2015 - 12:00pm

Duke University School of Medicine

**EVENT**



**Basic Science Day**

November 16, 2015 - 9:30am

Trent Semans Center for Health Education - Great Hall

Keynote: James Allison, PhD

[View all news](#)

[View more events](#)

**Duke University School of Medicine**

Quick Links

- About Us
- Education
- Research
- Contact Us

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DEPARTMENT OF MEDICINE (OLD) HOME PAGE, 11/23/2012



# Duke Department of Medicine

Duke University School of Medicine

- Home
- Education and Training
- Faculty
- Research
- Patient Care
- About the Department

Quick Links

- Divisions
- Calendar
- Contact Us



Text: A A A

Share Print E-mail

## Excellence in Research, Teaching, and Patient Care

The Duke Department of Medicine has a rich tradition of excellence in research, teaching and patient care. Our research programs span the spectrum from basic discovery science through innovative clinical and translational health science research addressing the major health care problems of the day. We consistently rank in the top tier of academic departments in funding and high impact productivity. [Learn more about us.](#)

### Lefkowitz wins 2012 Nobel Prize in Chemistry



[Robert Lefkowitz, MD](#), professor of medicine (Cardiology), a winner of the 2012 Nobel Prize in Chemistry, discusses his approach to science and life in a public conversation Nov. 1, 2012, with Duke University President Richard H. Brodhead.

Lefkowitz is a Howard Hughes Medical Institute investigator who has spent his entire 39-year research career at the Duke University Medical Center.

Read about the discussion here: <http://today.duke.edu/2012/11/lefkowitzdukeidea> and learn more the Lefkowitz Nobel here: <http://spotlight.duke.edu/lefkowitz>.

#### News

Monitor the [MedicineNews blog](#) for news & updates from the Department of Medicine, School of Medicine and beyond.



#### Training

The [Internal Medicine Residency Program](#) trains physician leaders in innovative, compassionate patient care.



#### Patient Care

Visit [DukeHealth.org](#) for information about patient care services offered by Duke Medicine.



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[Duke Medicine](#) | [School of Medicine](#) | [Duke University](#)  
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DEPARTMENT OF MEDICINE (NEW) HOME PAGE, 10/15/2015

Department of Medicine  
Duke University School of Medicine

Search

About the Department | Division | Faculty | Patient Care | Research | Education and Training | Miscellaneous

Driving new discoveries,  
improving patient care

**Excellence in Research, Teaching, and Patient Care**

Our passion for the three-part mission of academic medicine, our dedication to excellence, and our focus on creating partnerships is what sets Duke apart.

**Our faculty**

425 faculty who drive Duke's research, patient care and education missions. See their profiles.

**Our trainees**

300 fellows and residents working to become the next generation of internal medicine doctors and physician scientists. Train with us.

**Our patients**

They come from near and far for evidence-based treatment and innovative clinical trials. Find a physician.

**Our research**

In the top 5 for federal research funding, with exciting investigators helping to advance medical science. Explore our science.

**Developing physician-scientist leaders**

The Robert J. Lefkowitz Society provides a home for MD and MD/PhD post graduate trainees who are pursuing careers with primary focus on basic and translational research as physician-investigators. The Lefkowitz Society is named for Robert J. Lefkowitz, MD, professor of medicine in the Division of Cardiology and recipient of the Nobel Prize for Chemistry 2012.

[Learn more](#)

**Why diversity matters to us**

A sincere and long-standing commitment to the recruitment, retention and development of a diverse group of faculty and trainees, with particular attention to underrepresented minorities and women.

[Learn more](#)

**Spotlight: Division of Gastroenterology**

The faculty within the Duke Division of Gastroenterology includes some of the world's authorities in digestive tract physiology, clinical, small intestine, and colon, pancreatic, and liver diseases. The division has active basic/translational and clinical research programs pertinent to most of the major disorders in these areas.

[Learn more](#)

**Recent News**

**FEATURED NEWS: RESEARCH**

**Clearing Hospital Rooms With Chemicals, UV Rays Cuts Superbug Transmissions**

A new study from Duke Medicine has found that using a combination of chemicals and UV light to clean patient rooms cut transmission of flu-like bugs.

[View all news](#)

**Upcoming Events**

**EVENT**

**Patient Engagement in Clinical Research: Progress and Opportunities**

October 15, 2015 - 12:00pm  
Duke North, Room 200  
Emily O'Brien, PhD

**EVENT**

**From the Rivers of Babylon to the Cornucopia Blood Stream: The arbovirus Isary**

October 16, 2015 - 8:00am  
Duke North, Room 200  
Barry Collier, MD

**EVENT - WEBINAR/VIDEO**

**Approaches to understanding APOL1 mechanisms: A key to addressing the pressing health inequality of CKD**

October 15, 2015 - 8:30am  
Duke North, Room 200  
John R. Sedor, MD

[View all events](#)

**NEWS: AWARDS - GRANTS**

**pcori**

**pcori receives Eugene Washington PCORI Engagement Award**

Sherry Bookman, MD, MPH, chief of the division of general internal medicine, recently received a funding award from the Patient-Centered Outcomes Research Institute (PCORI).

**NEWS: AWARDS - GRANTS**

**pcori**

**Thomas Receives \$2 Million PCORI Grant**

Kevin Thomas, MD, assistant professor of medicine (Cardiology) has received a grant from the Patient-Centered Outcomes Research Institute (PCORI).

[View all news](#)

**NEWS: AWARDS - GRANTS**

**AIMA recognizes Joe Derry with 2015 Distinguished Service Award**

The Alliance for Academic Internal Medicine has recognized Joe Derry, vice chair for academic affairs, with the 2015 AIMA Distinguished Service Award.

**NEWS: RESEARCH**

**Identifying Stable Chronic Infections' Sex P-Value: Clues Into the Brain**

A study led by John Perkes, MD, chief of the Division of Infectious Diseases, using transparent fish to search in real time as *Opisthorchis*.