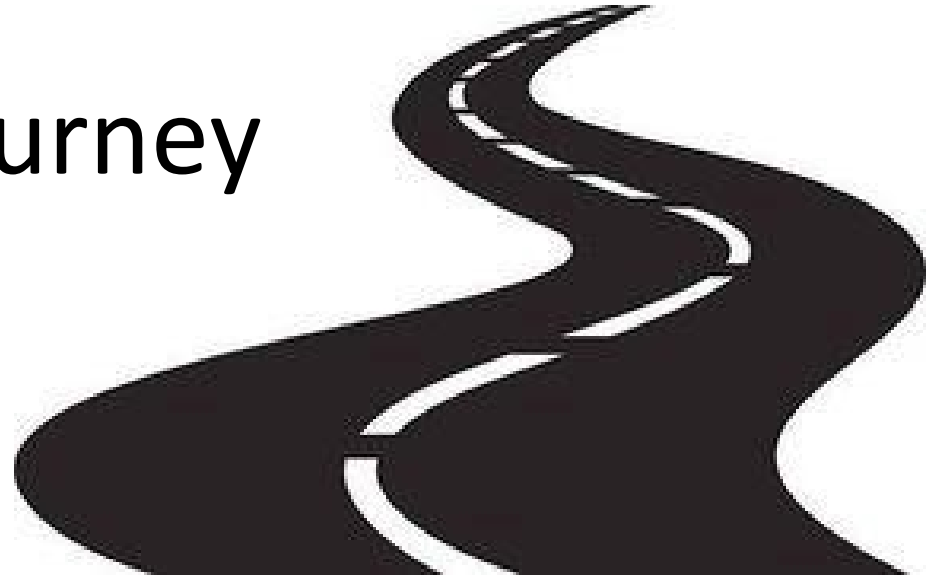


The Technical Journey

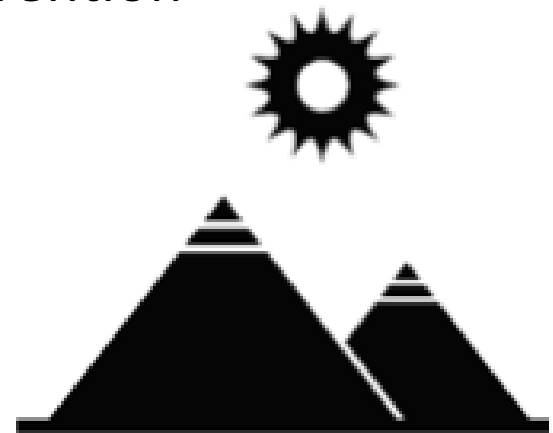


Dave Conder, CTO

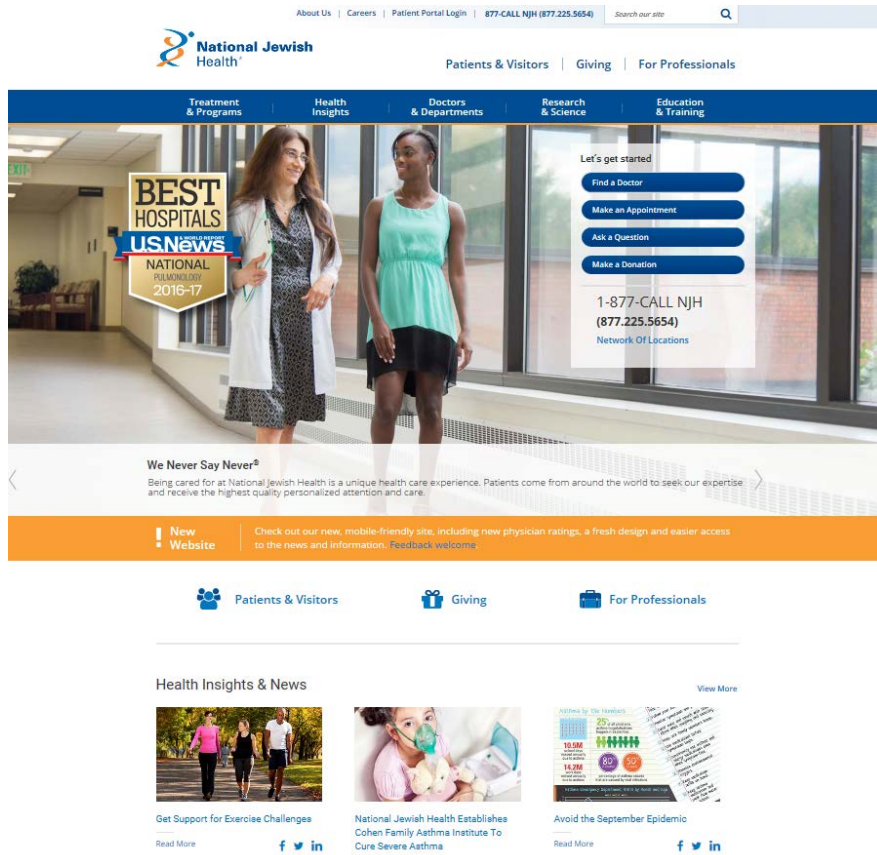
blueModus
Digital Technology. Tamed.

The Migration to Kentico

- Transform unstructured data into structured (departments, news items, events, patient stories and testimonials, etc.)
- Iterative and Automated Process
- Still Required quite a bit of manual intervention



Relaunch 2016



This was not a *redesign*, it was a complete relaunch that would repurpose nearly 10,000 pages and documents

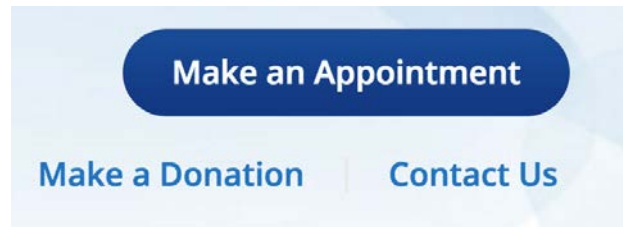
Upgrade & Migration Process

- Site was on v7.44
- Wanted to go to 8.2
- Upgraded site first
- Created copy of prod instance. Renamed prod to ARCHIVE. Created RELAUNCH in the same instance. Configured Staging from PROD To ARCHIVE
- Worked great, although NodeGUID changed when moving documents between sites



New Base Page Type

- PageContent, PageImage, etc.
- Calls to Action Links with inheritance



- Categories on Form Tab

Categories:

| <input type="checkbox"/> Category | <u>Enabled</u> |
|--|----------------|
| <input type="checkbox"/> Adult-Peds > Adult | Yes |
| <input type="checkbox"/> Conditions > Allergy | Yes |
| <input type="checkbox"/> Document Types > Lifestyle > Allergy | Yes |
| <input type="checkbox"/> Document Types > Related Conditions > Allergy | Yes |
| <input type="checkbox"/> Document Types > Related Programs > Allergy | Yes |
| <input type="checkbox"/> Document Types > Tests We Offer > Allergy | Yes |

Custom Tools

- Bulk Template Change
- Copy content from page to form tab
- Rebuild Relationships - Since we copied content over, the previous relationships didn't move because the targets had different IDs
- Create MigrationLog fields for content team to keep track of everything
- Re-sync document aliases
- Safe Robots.txt



SEO

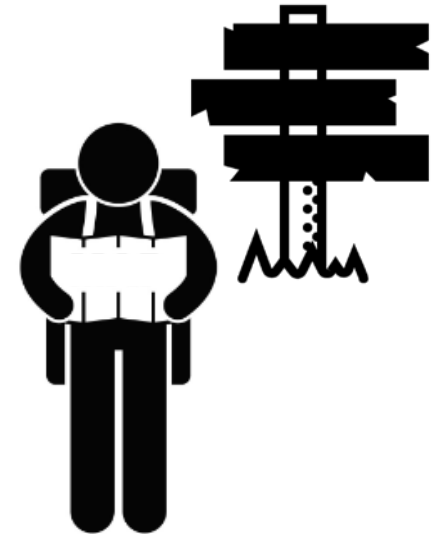
- Exported all page URLs and all DocumentAliases
- Used tools to crawl and report
- Ran same crawl against dev server when content was mostly in place, found gaps and re-mapped aliases
- Over 14k total URLs



Complex Taxonomy

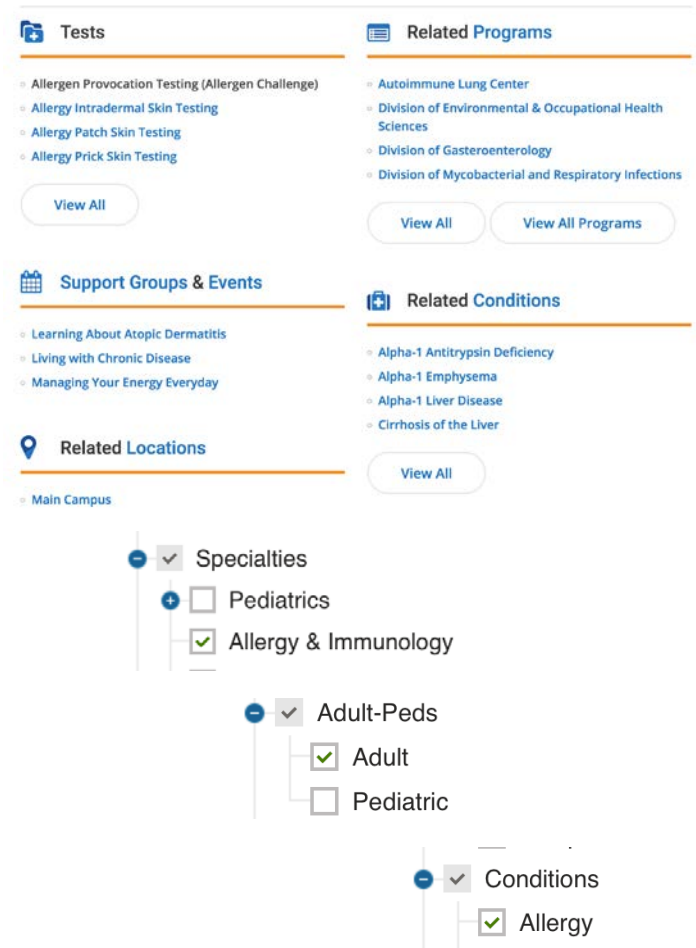
- Categories in Kentico are great tools for taxonomy, but they have some limitations
- They support searching by categories out of the box
- But there is no way to create more complex structures without customization

To solve this, we created what we call ***SuperCategories***.



SuperCategories

- Allows explicit business rules to link documents based on four major Categories
 - Adult/Pedatric
 - Page Types
 - Path
 - Category Families
- These allow related, relevant, and targeted content to appear anywhere on a page.
- We used macro methods to display these rather than web parts since they can sit within content



SuperCategory Examples

Condition Information



- Allergic Bronchopulmonary Aspergillosis (ABPA)
- Allergic Rhinitis
- Allergy: Overview
- Anaphylaxis
- Angioedema
- Asthma: Overview
- Churg-Strauss Syndrome
- Eczema (Atopic Dermatitis)
- Eosinophilic Lung Disorders
- Food Allergies

[View All](#)

Conditions We Treat

- Adult/Pediatric value - all content is related to one or the other, so similar documents should be returned if specified
- Page types - NJH.Condition; CMS.Menuitem
- Category families: Specialties; Conditions
- Path: /conditions/%

SuperCategory Examples



Related Programs

- Clinical Nutrition Services
- Division of Allergy and Clinical Immunology (Adult)
- Division of Environmental & Occupational Health Sciences
- Division of Pulmonary, Critical Care and Sleep Medicine (Adult)

[View All](#)

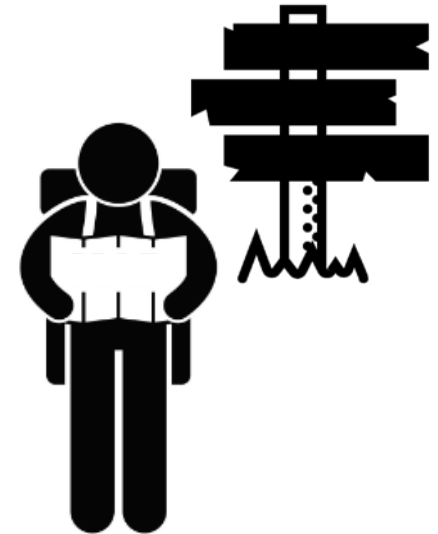
[View All Programs](#)

Related Programs

- Adult/Pediatric value - all content is related to one or the other, so similar documents should be returned if specified
- Page types - NJH.Service; CMS.Menuitem
- Category families: Document Types/Related Programs
- Path: /Treatment-Programs/%

SuperCategory Module

- We'd like to release the SuperCategory module as open-source
- A customizable tool that would allow user to define each type and set the rules



Complex Sub-Navigation

- There are 3-level hierarchical transformations
- The rules for the sub-navigation varies from page to page.
- In some cases, simple path expressions can be used:

Path: ▶

Select

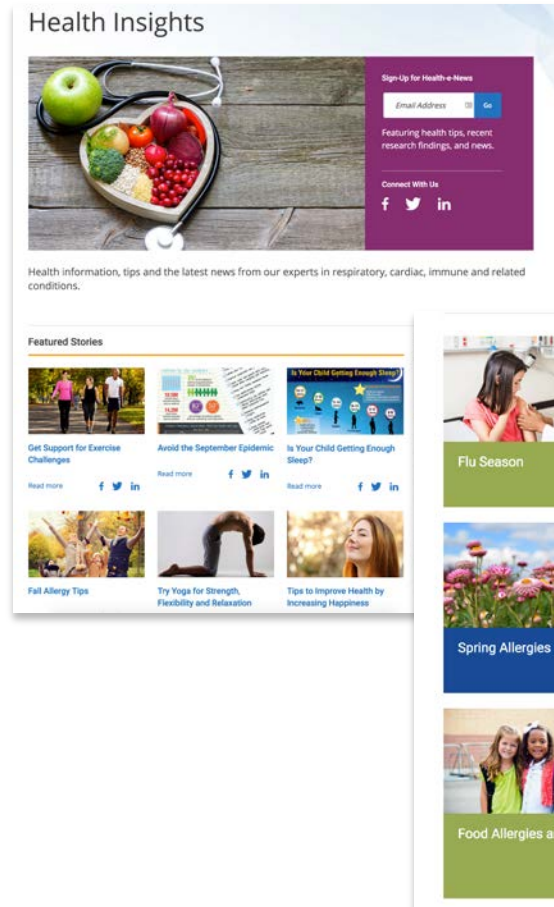
- In others, we created a macro method that allows any offset to be specified:

Path: ▶

Select

Health Insights

- Dynamically identified by configuration using SuperCategories
- Can be any type of content: pages, events, news, etc.
- Embeddable anywhere on the site with automatic context filters



Press Ganey Integration

- Full integration with PG for doctor ratings and reviews
- Schema.org rich snippets for SEO

Barbara L. Goldstein, MD, MMSc - National Jewish Health

<https://www.nationaljewish.org/doctors.../barbara-l-goldstein> National Jewish Health

★★★★★ Rating: 4.8 - 148 votes
Special Interests. Clinical and Research Interests. Dr. Barbara Goldstein is on the faculty of National Jewish Health and Denver Health specializing in rheumatic ...

Barbara L. Goldstein, MD, MMSc

Make an Appointment
Ask a Question Refer Patient

Doctors & Departments

Find a Doctor

Departments & Divisions

Top Doctors in the Nation

Assistant Professor
Department of Medicine
Division of Rheumatology
5280 Top Doctors 2016

Email Profile Print Profile

Patient Rating
★★★★★
4.8 out of 5 stars

148 Patient Ratings
15 Patient Comments

About the Doctor Contact Info & Locations Patient Ratings & Comments

Patient Ratings

The Patient Rating score is an average of all responses to care provider related questions on our independent rating system, the Press Ganey Patient Satisfaction Survey.

Responses are measured on a scale of 1 to 5, with 5 being the best score. [Learn more about our patient satisfaction survey.](#)

PLG Data Integrity Press Ganey Certified

| Friendliness | Recommended to others | Explanation of problem/condition |
|-----------------------------------|---------------------------|----------------------------------|
| 4.9 ★★★★★ | 4.7 ★★★★★ | 4.7 ★★★★★ |
| Shows concerns for your questions | Includes you in decisions | Spoke using clear language |
| 4.8 ★★★★★ | 4.7 ★★★★★ | 4.9 ★★★★★ |
| Amount of time spent with you | Confidence in your doctor | |
| 4.8 ★★★★★ | 4.8 ★★★★★ | |

Comments

Comments are collected in our Press Ganey Patient Satisfaction Surveys. Patients are de-identified to protect confidentiality and patient privacy. [Learn more about our patient satisfaction survey.](#)

National Jewish Health Patient - June, 2016
I love "Dr. Goldstein" I feel like we are a team working towards the best health possible for me.


National Jewish Health Patient - June, 2016
"Dr. Goldstein is wonderful - a caring, well informed, genuine & compassionate dr."

National Jewish Health Patient - June, 2016
Thank you Dr Goldstein for the excellent care that you give me!! I am blessed to have found you!!

National Jewish Health Patient - June, 2016
Dr Goldstein is excellent. Very friendly, open, highly intelligent and straight forward

Search - Staff

Find a Doctor



Physician Ratings Online

At National Jewish Health, we believe that patients should make informed choices about their health care and physicians. That's why we post patient satisfaction scores and comments on our website.

★★★★★

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[Make an Appointment](#)

Search by Keyword

[All](#) [Pediatric](#) [Adult](#) [Researchers](#) [Nurses & Medical Staff](#)

[Search](#)

View by Last Name

A B C D E F G H I J K L M

N O P Q R S T U V W X Y Z

View by Specialty & Conditions


Please Select

View by Research Area


Please Select

[+ New Search](#)


Showing all results for *Last Name: A*




Jordan Abbott,
MA, MD




Rafeul Alam, MD,
PhD




Crystal Alderfer,
MSPT




Mark S. Alola,
PhD



Scott Alper, PhD



Rosane De
Oliveira Duarte
Achcar, MD



Rafeul Alam, MD, PhD

Chief, Division of Allergy and Clinical Immunology
Professor
Veda H. and Chauncey H. Ritter Chair in Immunology
Department of Medicine
Division of Allergy & Clinical Immunology

[View Full Profile](#)

Patient Rating

★★★★★

4.8 out of 5 stars

[Make an Appointment](#)

Search – Conditions & Programs

SpecialtiesAll ConditionsPediatrics

Search All Conditions by Keyword

Search

Featured Conditions

Allergy

Asthma

COPD

Interstitial Lung Disease (ILD)/Pulmonary Fibrosis

Lung Cancer

Pediatrics

Pulmonary Hypertension

View All

A B C D E F G H I J K L M

N O P Q R S T U V W X Y Z

A

Allergic Bronchopulmonary Aspergillosis (ABPA)

Allergic Rhinitis

Allergy

Alpha-1 Antitrypsin Deficiency

Amyotrophic Lateral Sclerosis (ALS)

Anaphylaxis

Angioedema

Anxiety

Asbestosis

Asthma

B

Barrett's Esophagus

Bronchiectasis

Bronchiolitis Obliterans

C

Cardiac Conditions

Cardiac Sarcoidosis

Chronic Beryllium Disease

Chronic Bronchitis

Chronic Cough

Chronic Obstructive Pulmonary Disease (COPD)

Chronic Respiratory Infections

Churg-Strauss Syndrome

L

Latex Allergy

Lung Cancer

Lung Nodules

Lupus

Lymphangioleiomyomatosis

M

Mastocytosis

Medication/Drug Allergy

Mesothelioma

Metal and Cement Allergies

Methicillin Resistant Staphylococcus Aureus (MRSA)

Multi-Drug Resistant Organisms (MDRO)

Myositis

N

Narcolepsy

Nontuberculous Mycobacteria (NTM)

O

Obstructive Sleep Apnea

Occupational Asthma

Osteoarthritis


Osteoporosis

Search by Name

Search

National Jewish Health for Kids

Dedicated care from America's best pediatric specialists in the areas of asthma, allergies, atopic dermatitis and more.



All Programs & Services

View All

A B C D E F G H I J K L M

N O P Q R S T U V W X Y Z

A

Adult Cystic Fibrosis Clinic

Adult Cystic Fibrosis Program

Adult Gastroenterology Program

Advanced Diagnostic Laboratories (ADx)

Allergy and Clinical Immunology, Adult

Allergy and Clinical Immunology, Pediatric

Allergy Treatment Programs, Adult

Allergy Treatment Programs, Pediatric

Alpha-1 Antitrypsin Deficiency Program

Ambulatory Pediatrics

Anticoagulation Clinic

Aquatic Therapy

ARCH Program

Art Therapy

Asthma Toolkit Program

Asthma Treatment Program

Atopic Dermatitis Program, Pediatric

Autoimmune Lung Center

B

Beryllium Program

Biostatistics and Bioinformatics

Blood Cancers

Bronchial Thermoplasty

Bronchiectasis Treatment Program

Building Trades National Medical Screening Program

M

Medical Screening Program Provider for Former Dept. of Energy Workers

Medical Surveillance Program

Metals Allergy Testing Program

Miners Clinic of Colorado

Minimally Invasive Diagnostic Center

Morgridge Academy

Mount Sinai - National Jewish Health Respiratory Institute

Mycobacterial and Respiratory Infections

Mycobacterial Diseases Consult Service

Mycobacteriology Laboratory

N

Nasal Disorder

National Jewish Health - Saint Joseph Hospital

National Jewish Health for Kids / Pediatric Programs

National Supplemental Screening Program (NSSP)

Neuropsychology Program

Neuropsychology Services, Pediatric

NTM Center of Excellence

NTM Infections Treatment

Nursing


Nursing - Administration

Nursing - Adult

Nursing - Pediatrics

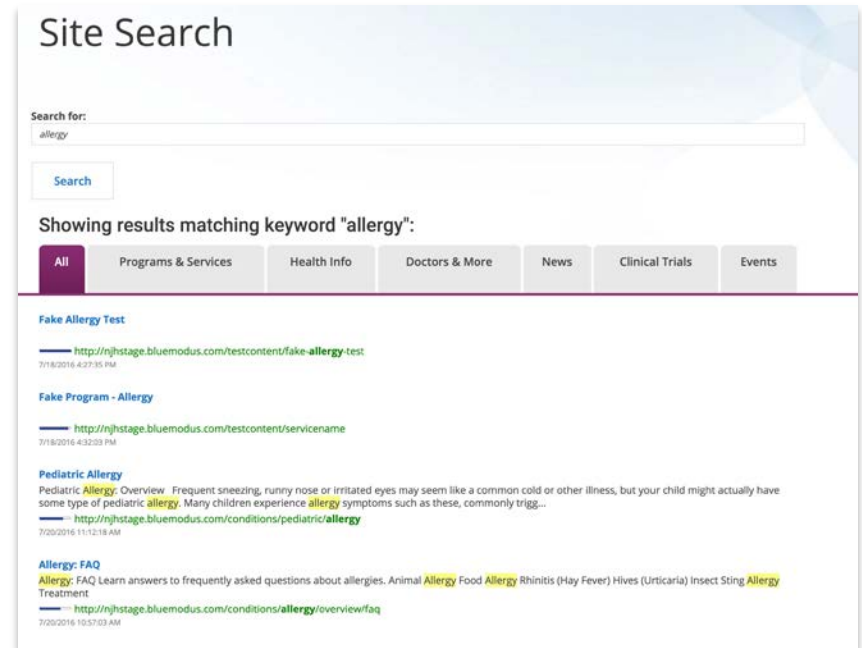
Nutrition Services

blueModus
Digital Technology. Tamed.

 **National Jewish Health**
Science Transforming Life®

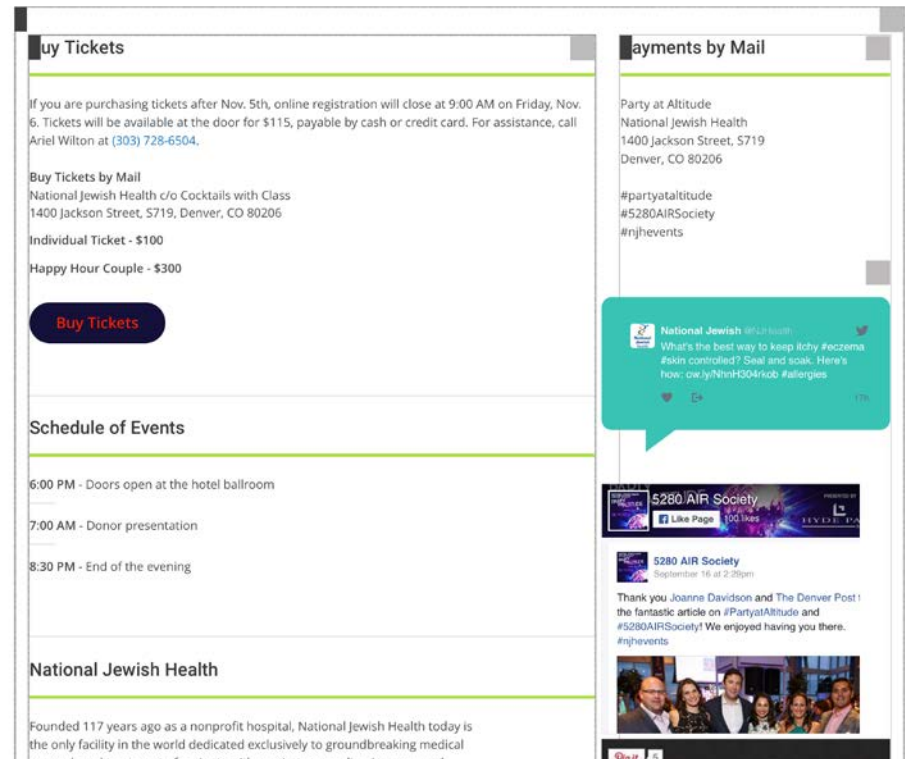
Site Search

- Uses SmartSearch
- Multiple indexes, dynamic page type filters based on search mode



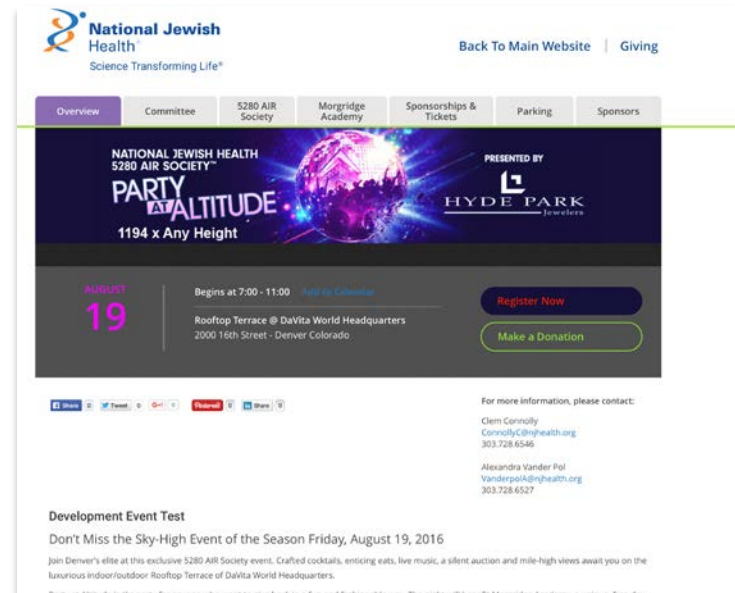
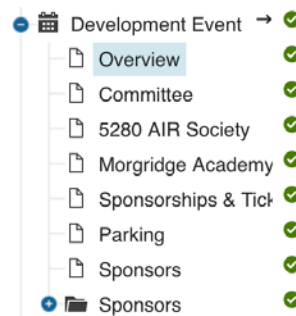
Bootstrap Layout Widgets

- Many pages need unique layouts and need to be easy to manage
- Bootstrap Layouts, Tabs, and Accordions
- Fully responsive



Event Microsites

- Auto-scaffolding with complete structure
- Downloadable ICS
- Options for ticket purchase
- All colors and styles are customizable at the root level of each microsite
- Bootstrap layouts with pre-built pages



...And lots more

- There are a lot more pieces to this puzzle
- Kentico is a tremendous platform that offers great flexibility
- Next Steps – EMS, testing and other advanced marketing activities



Thank you!



Dave Conder, dconder@bluemodus.com