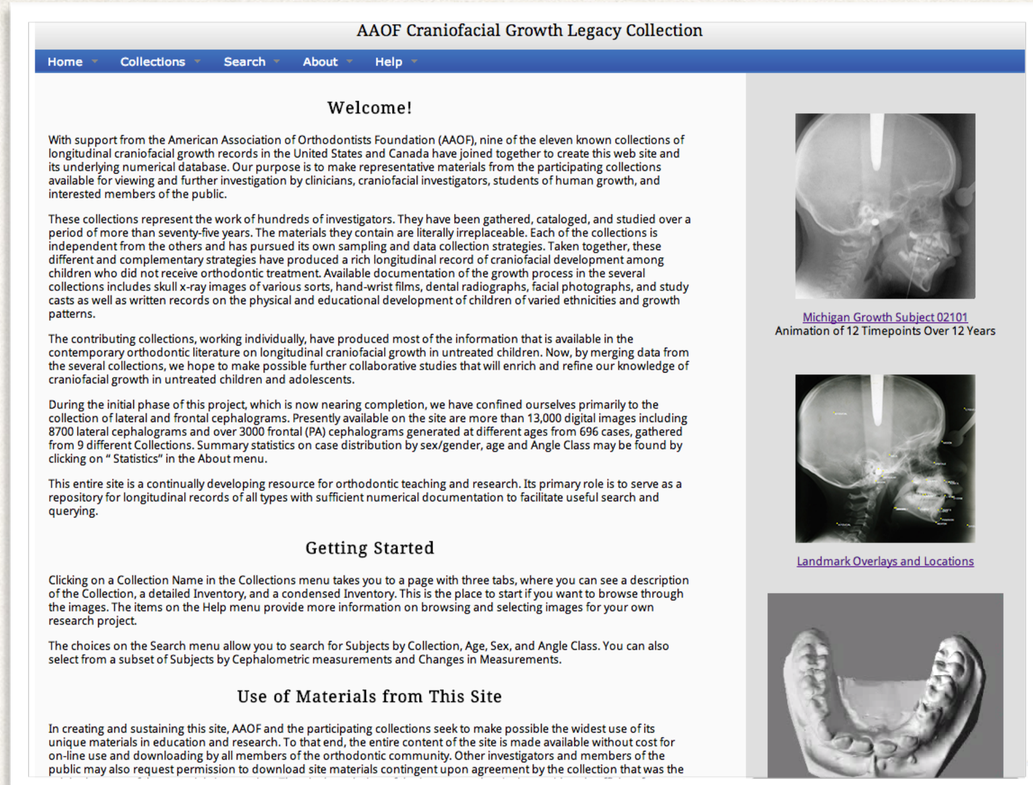
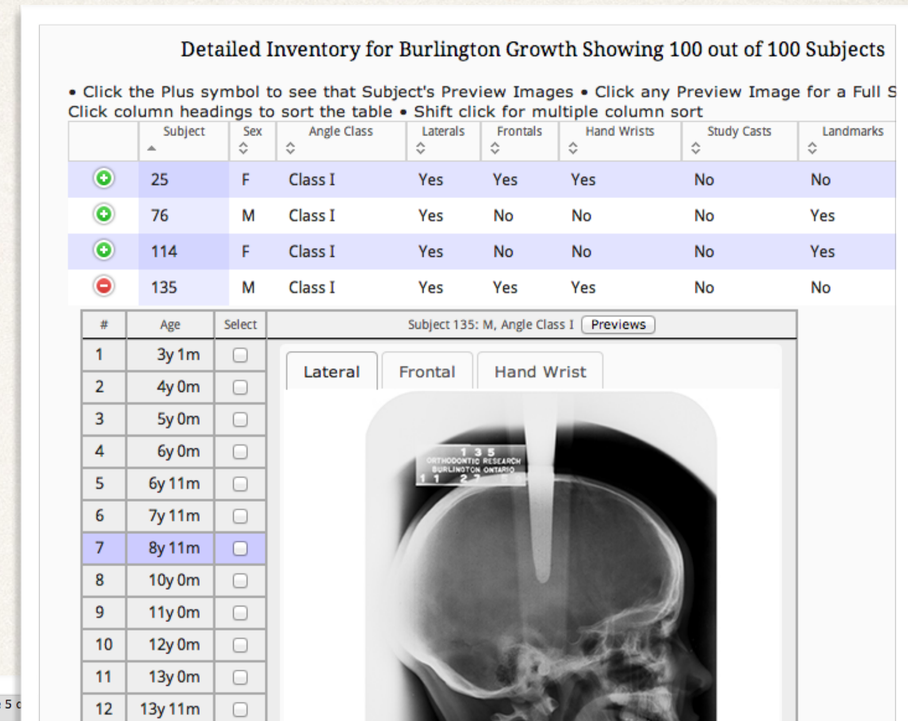
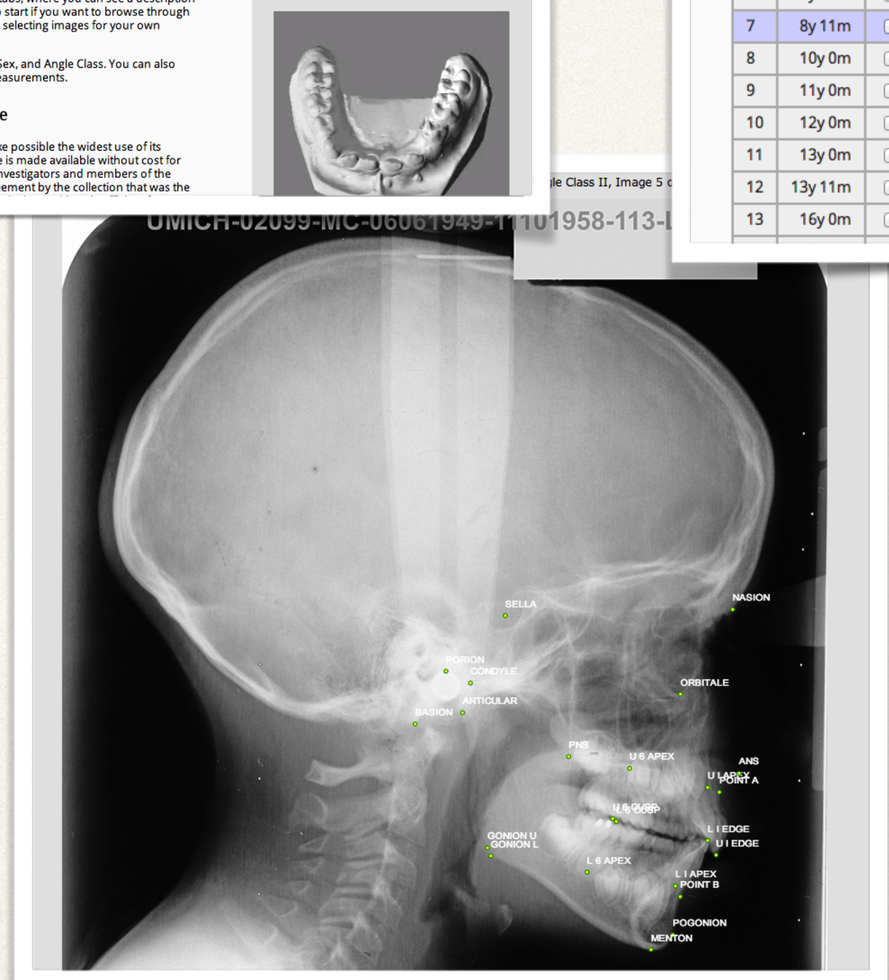






AAOF Craniofacial Growth Legacy Collection

2014 Status Report

Sean Curry, November, 2014

AAOF Legacy Collection Status Report

- Collection Status
- Website Infrastructure
- Usage Statistics
- Image Requests
- Q and A

Legacy Collection Status

- Collection is now in maintenance mode
- All available images have been processed and loaded to the website and database
- Website and database are stable, and software being updated as new versions become available
- Requests are being filled
- Some image renaming in progress, as resources allow

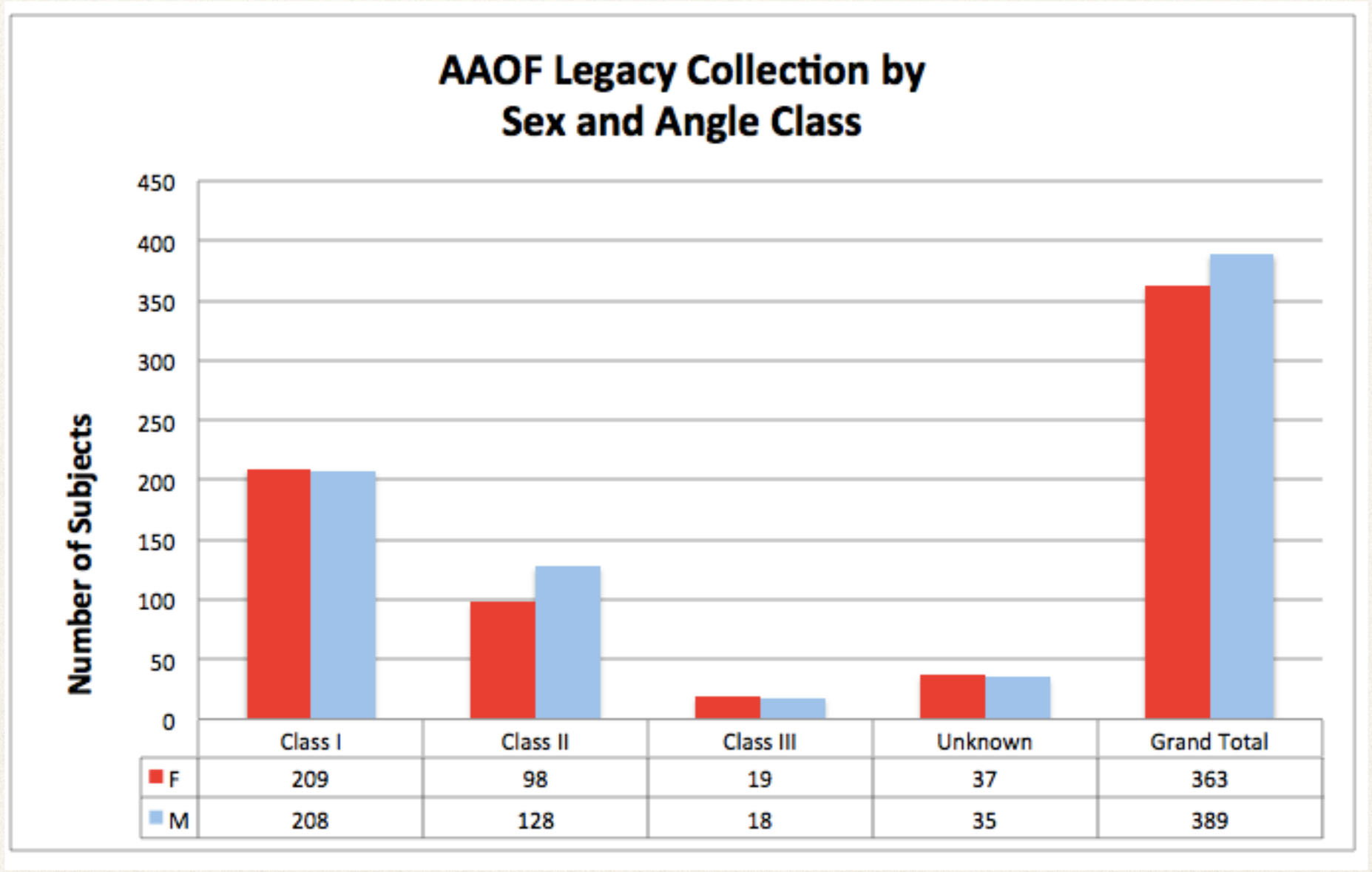
Legacy Collection Image Counts

	Nov 2011	Nov 2012	Nov 2013	Nov 2014
Collections	9	9	9	9
Subjects	194	566	696	752
Lateral Cephs	2000	6200	8700	10200
Frontal Cephs			3200	5800
Total Images	2500	8900	12500	16000

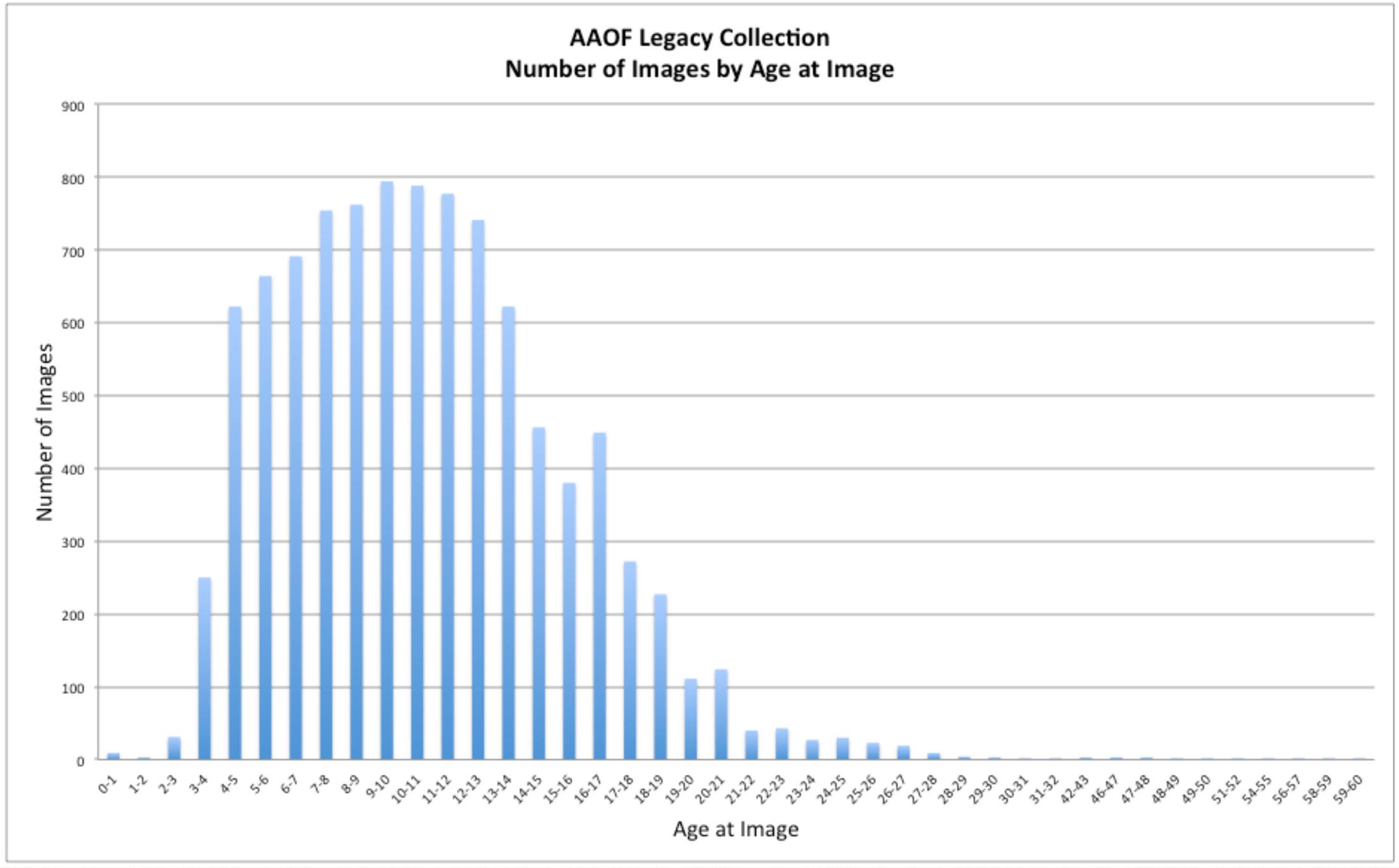
Subjects Per Collection

Collection	Subjects
Bolton-Brush Growth	102
Burlington Growth	100
Denver Growth	94
Fels Longitudinal	102
Forsyth Twin	10
Iowa Growth	100
Mathews Growth	35
Michigan Growth	102
Oregon Growth	107

Subject Distribution



Subject Images by Age



Website Infrastructure

- Website and database are hosted on Amazon AWS EC2
- Has been extremely reliable and fast
- PostgreSQL Database
- Node.js Web Server
- Various Javascript libraries for web pages
- All components are updated as new software versions become available
- Heartbleed and bash security patches applied immediately

Ongoing Routine Maintenance Tasks

- Website monitoring - I get automated emails and text messages if site is unavailable
- Current site has been up for over a year, down only briefly for a software upgrade
- Capacity and usage analysis
- Statistics
- Miscellaneous bug fixes
- Request logging
- Website and database backups

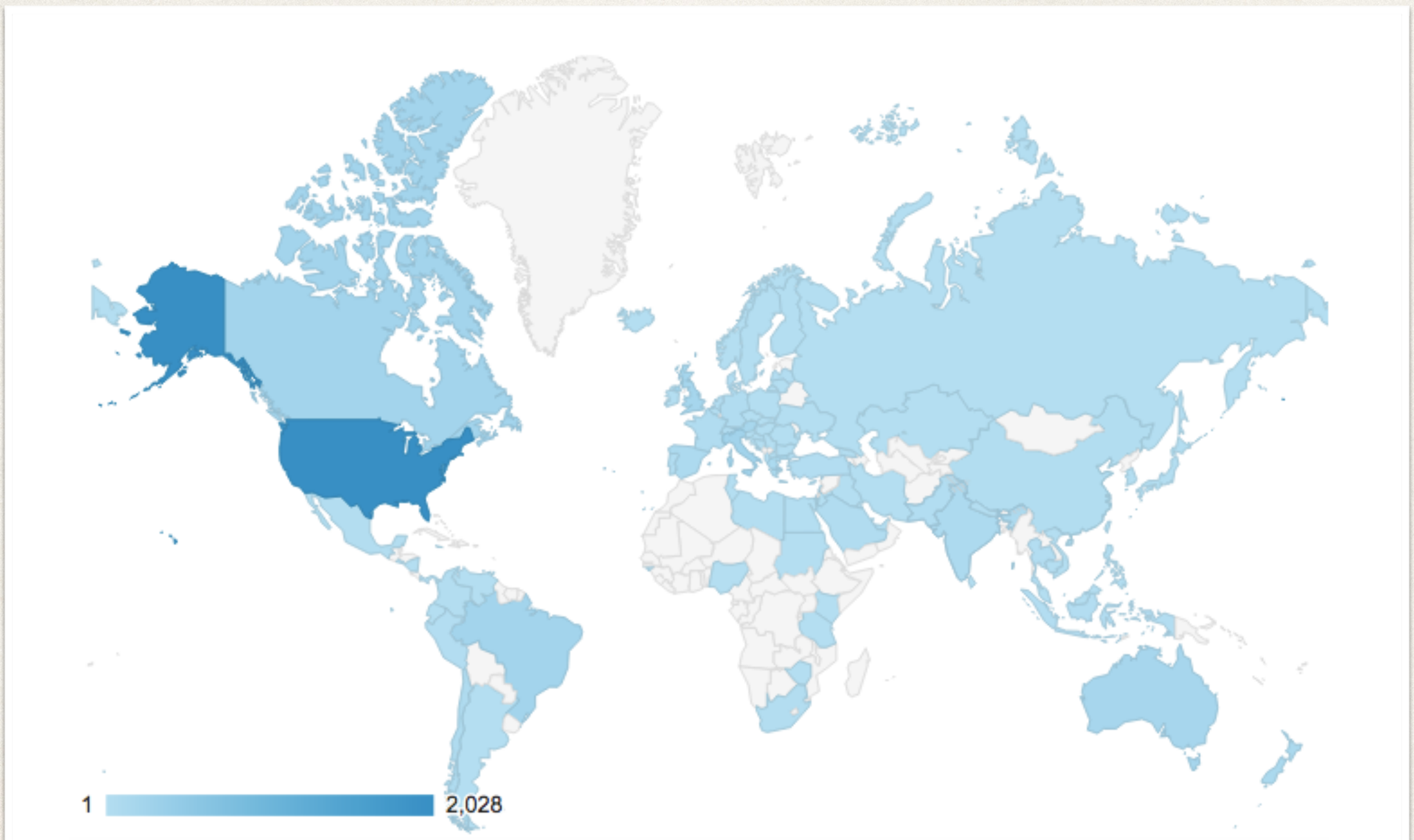
Backup Strategy

- For data security, 3 backups are needed
  - Local
  - Offsite
    - Different media
- Local backup is on Amazon AWS
- Offsite backup on a USB hard drive stored in Portland, OR
- Third backup on a different drive in a safety deposit box

Fiducial Document

Website Usage 2014

- Results from Google Analytics for Nov 2013 - Nov 2014
- Approximately 26,000 Pageviews
  - Up from last year, which totaled approximately 20,000 page views
- 2200 Users, 4600 Sessions
- Most visited Collections:
  - Bolton-Brush Growth
  - Burlington Growth
  - Denver Growth



World Wide Interest - Google Analytics Website Visits

1.	United States	**2,028** (44.52%)
2.	Italy	**265** (5.82%)
3.	Canada	**250** (5.49%)
4.	Brazil	**243** (5.33%)
5.	United Kingdom	**194** (4.26%)
6.	Australia	**188** (4.13%)
7.	Austria	**170** (3.73%)
8.	New Zealand	**122** (2.68%)
9.	Greece	**108** (2.37%)
10.	India	**103** (2.26%)

Sessions From Top 10 Countries

How do Users Find the Website?

Source	Acquisition: Sessions
	970 % of Total: 21.30% (4,555)
1. aaofoundation.net	366 (37.73%)
2. semalt.semalt.com	105 (10.82%)
3. ohsu-hca.blogspot.com	82 (8.45%)
4. orthodonticproductsonline.com	70 (7.22%)
5. dental.case.edu	49 (5.05%)
6. dentistry.utoronto.ca	48 (4.95%)
7. facebook.com	23 (2.37%)
8. 10.22.2.1:4990	21 (2.16%)
9. orthocorner.blogspot.in	12 (1.24%)
10. orthocorner.blogspot.com	11 (1.13%)

Referrals from Websites

Keyword	Acquisition: Sessions
	1,806 % of Total: 39.65% (4,555)
1. (not provided)	1,603 (88.76%)
2. aaof legacy collection	32 (1.77%)
3. aaof	29 (1.61%)
4. aaof legacy	27 (1.50%)
5. aaofcollection	17 (0.94%)
6. aaof legacycolection	14 (0.78%)
7. aaof collection	12 (0.66%)
8. aaoflegacycollection	7 (0.39%)
9. growth centre for craniofacial growth	4 (0.22%)
10. aa of craniofacial growth legacy collection	3 (0.17%)

Search Terms

Image Requests - 2014 Status

- Approximately 24 Image Requests Nov 2013 - Oct 2014, compared to 9 in 2013
- Approximately 6135 images supplied, vs 1080 images in 2013
- As in 2013, many international requests
- Publications beginning to appear
- A wide variety of research projects

Sample Image Requests

- I am an orthodontic resident at Eastman/University of Rochester and I'm working in my research project about mandibular growth modification with the Forsus appliance in patients with different growth patterns and I would like to use the Bolton sample as a control group (untreated patients).We are doing a research about the reliability of the CVM method using images of your collections and we would be grateful if you could send us higher resolution versions of our selected images in order to perfom clear cephalometric measurements

- My name is Adam Leung and I am a post-graduate orthodontic student at the University of Adelaide. I am conducting a growth study using lateral cephalograms from the Denver collection. Professor Wayne Sampson has contacted Dr Baumrind and informed him of our intention to use the legacy collection for research purposes. We will be sure to credit the appropriate collection as requested.

Sample Image Requests

- I am currently undertaking a research project here at the University of Adelaide and am studying soft tissue nasal profiles specifically.

- We are doing a research about the reliability of the CVM method using images of your collections and we would be grateful if you could send us higher resolution versions of our selected images in order to perfom clear cephalometric measurements

- I'm taking a Masters degree in Orthodontics in the Bauru Dental School, University of Sao Paulo. I'm writing a thesis about the stability of Class III malocclusion treatment and in order to differentiate changes related to relapse from those arising in the normal growth, assessing thus the influence of growth on stability of treatment, I need a control sample of 30 patients with normal occlusion and average initial age and gender-matched to my experimental group. Unfortunately, I couldn't find such sample on the university files, which is why I am kindly requesting the images above related.

Summary

- All current images have been loaded to the website and database
- The AAOF Legacy Collection Website and database are stable
- Image requests have increased over the last year
- As always, thanks to the AAOF and the Curators for enabling me to work on this project - it continues to be very interesting and challenging!

Questions?