

2018 JCEG X Meeting Summary

Wednesday

(Notes provided by [Carla Evans](#))

Legacy Site Report – Sean Curry

The legacy project is in year 1 of a 5 year AAOF award for site maintenance.

Amazon charges ~\$150 for storage. Plan is to use FTP to deliver images from Amazon.

Shelly Baumrind's daughter (Resa?, lives in Utah) has off-site copies and logins/passwords.

Backups: Local, Amazon, portable drive in Portland OR, portable drive in safety deposit box, portable drive at CRIL (Hee Soo Oh) in San Francisco

Scale usage guidelines/instructions info sent with requests.

Demo – Monoprice 3D printer, \$190

A Chinese mixed-longitudinal collection from Beijing is available. Consists of 164 subjects (ages 7-14, 10-14, 12-16, 14-18) with lateral, frontal and hand-wrist radiographs as well as study casts. Estimated cost to validate information and upload is \$10,000. The maintenance fee doesn't increase over the present amount and there will be no ongoing costs. The group passed a motion to ask AAOF if \$10,000 can be added to this year's budget. If this happens, a press release should be distributed.

For the existing uploaded subjects, study models (.stl data) are ready to upload. Sean will take one study model series from each collection as a test. Jim McNamara will be the consultant. Then there will be a new proposal including a viewer for sorting and a 3D viewer for measuring.

With the surge in 3D printing, many new software packages are available; much of it is free.

Suggestions from the group for Sean Curry: It is important to demonstrate how the collection is being used. Automatic email reminders could be sent to users to request publications. Due to the difficulty of tracking ortho residents after graduation, the user agreement could be modified to add an institutional person's email for follow-up emails.

Forsyth Collection Report – Alp Kantarci and Melih Moto (attending remotely)

Slide presentation presented (see slides for detailed information about numbers scanned and publications). Alp asked for missing Forsyth twin publications to be sent to him. The request for funding for the Forsyth data will be forwarded to AAOF with support from the JCEG group.

Archivist Steve Duckworth

Talked about grant opportunities

Richard Sherwood

Gave update about NIH growth prediction grant. Another grant on 3D growth using CBCTs is pending.

Denver Study - Frans Currier (attending remotely)

The lateral and PA radiographs, casts and photos are all electronic.

JCEG section of Confluence software - Toni Magni (attending remotely)

Thursday

Behrents

Clear plastic devices to move teeth – is the orthodontist critical?

What should educators be doing?

New practice designs, e.g. ULab in house manufacturing and boutique stores

Faster or not faster?????

? real differences between aligner tx and fixed tx (marketing). Diagnosis by experts

Impact on applications to ortho specialty programs

In specialty practice, more retreatments and increased difficulty of cases

CODA standards 1. Increase clear aligner training in ortho proposals?

2. for predocs increased emphasis on diagnosis independent of appliance?

Maybe JCEG should send suggestions to CODA for postgrads and predocs

Class action suits against Align, but 510K intended use is very broad

Dan Castner

ORMCO (12 years) Lancer (sold to 3M, Incognito) 3M private equity Forestadent US

Inside fabrication

Invisalign has >50% orthodontic market, has 1200 technicians in Costa Rica

U-Line o- artificial intelligence software

Printable aligners – Envisiontech being evaluated by FDA for internalizing fabrication, not too far away

Caster study of treatment records: 50% don't go to completion, the time from scan to first aligner is 55 days. Invisalign is #1 overhead item in large practices.

Look at [Envisiontech.com/3d_printing_industries/medical/orthodontic](https://www.envisiontech.com/3d_printing_industries/medical/orthodontic)

Ideal system

1. **Printing** – 1. Print in office, 2. Printable material, shape memory plastics, FDA-approved biocompatibility, 3. printer & material must match. (Track, Zendura, Great Lakes) Some clinicians prefer TruTrain retainers to allow settling, thicker Essix does not.

At least six companies similar to Smile Direct exist, including Europe

[Foreverretainer.com?](https://foreverretainer.com/), goes to a provider

1. **Software** - 1. Fast automated, segments quickly
2. integrated with CBCT, e.g. Onyxceph (German) uses CBCT info for implant guides
3. ? ultrasound scanner does both crown & roots & facial crestal bone

Individual control in 3D by ortho provider (clincheck.pro with library of roots, Motionview 3D, 3Shape, Insignia). Root library is a compromise

Medical modeling uses radiopaque markers both in CBCT & intraoral scanning

Carter doesn't do Invisalign alone, does hybrid treatment only. 6-12 months fixed for roots and rotations, then finishes with his own aligners without attachments. Note – can use aligners to intrude posterior teeth in mild openbite. Also posterior occlusal buildup.

Manuel questioned limits of expansion with aligners.

Carter talked about nitinol mesh aligner, Carbon 3D Company.

Expiration of Invisalign patents.

Dan Knoch

Orthodontists are looking over general dentists' work

Trend – orthodontists providing consulting services for general dentists

Dolphin superimposition screen (**Ken Gladstone**)—Hard tissue translucent, do each side separately, tilt image to reorient reference box because box doesn't tilt, need to show canal in images (but can't highlight yet)

Friday

SUMMARY

See Also

Interesting links sent out by Dan Knoch

- <https://www.massdevice.com/align-tech-backed-smiledirectclub-levies-lawsuits-against-critical-dentists-orthodontists/>
- <https://www.bizjournals.com/nashville/news/2017/11/01/this-nashville-health-company-is-all-smiles-but.html>
- http://www.marketwired.com/printer_friendly?id=2146377
- <https://www.youtube.com/watch?v=w4VO8TszVcQ>
- <https://www.youtube.com/watch?v=gTZeUepzRb0>
- <http://markets.businessinsider.com/news/stocks/SmileDirectClub-Continues-to-Disrupt-the-Status-Quo-Fights-for-Consumer-Access-1004815567>

File	Modified
PDF File 2018 AAOF Legacy Collection Status Report Feb 2018.pdf	2018-02-21 by Carla Evans
Microsoft Word Document 2018 02 08 JCEG X meeting notes.docx	2018-02-21 by Carla Evans
Microsoft Word Document 2018 02 07 Legacy project notes.docx	2018-02-21 by Carla Evans
Microsoft Powerpoint Presentation 2018 02 07 Update on Forsyth Twin Studies.pptx	2018-02-21 by Carla Evans

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