

hardware

Hardware Question

Announcement made 05 June 2017

The Inspirata team is identifying hardware to build an eeDAP system at their location or at the Moffitt center in Tampa. They don't have a stage and controller matching what FDA has used and documented. They are asking if we could use a Zeiss system with a Marzhauser stage and controller and a B/W (not color) camera or an Evos Auto (no oculars).

Question 1 for everyone else: Is it better for us to try and build identical systems or different systems? I can see benefits in either direction.

My quick response: If we use the same hardware, we can finish the eeDAP MDDT with no new major software development.

- Alternative option 1 (moderately difficult): I think we could make the Marzhauser stage and controller and a B/W camera work. However, we will need to program new communications to the Marzhauser stage and controller.
- Alternative option 2 (difficult): The Evos Auto appears to be very similar to a Sakura VisionTek live digital microscope (a device that the MSKCC team has and has wanted to connect). These devices are not currently supported by eeDAP. If there is a way to communicate to these devices outside of their software, support could be developed. If successful, we could collect data on these kind of devices, which could be compared to evaluations from the digital WSI or the microscope (if a microscope system was also available).

Successfully implementing one or both alternatives would expand our specifications and demonstrate that the software can support other devices. The challenge is that development needs to be done where the equipment is, not remotely. Qi and I can help with any development, but the lead development will come from the owner of the hardware unless you want to bring us the device or come for a visit (brief or extended). Check out the software modules related to stage communications at

<https://github.com/DIDSR/eeDAP/tree/master/src/stages> . We will look into the B/W camera.

Hardware Update

Announcement made 01 June 2017

It was great seeing everyone at PI. It went so fast. Back to work ...

We have two groups that have successfully run eeDAP in digital mode. I encourage the rest of you to do this too. Please try. Qi and I will help.

HARDWARE

Now it is time to run eeDAP in microscope mode, this means putting the hardware together. We have documented the hardware we use and requirements for alternate hardware. That information can be found here,

[Link to Section III, Hardware](#)

Please review this documentation. It is critical for the MDDT device description.

Perhaps it would be best if all of us had the same hardware in order to trouble shoot problems. The USB devices are easiest to use and don't require special cables and adapters:

- Camera: Point Grey Grasshopper3 Color (GS3-U3-50S5C-C)
- Stage Controller: Prior ProScan III (H31XYZE-US/A)
- Stage: Prior (H101A/B)

I will be restarting the bi-weekly conversations following a similar schedule as before. Let me know if that schedule doesn't work for you.