**Progress report 2**

Tawab Karim

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| Date | 27/08/2019 |
| Subject | Collimator Alignment Tool |
| Project Term |  |

# Outcomes of the last meeting (13/08/2019)

* Schedule meeting with Jan and make concrete agreements on components (see appendix for more information)
* 2nd of September Laser cutter open again, in that week production of components can be finalized and Will can assemble the laserbox.

# Results during the last week(s)

* Meeting with Jan, the Old\_Prod.zip files will be all done before the end of September, this includes anodizing it black. (These are the microscope towers and all other parts needed for it to be usuable)
* Linear stage design finalized, non-make components ordered and received. Send files including drawings (still have to make these) to Jan before the next meeting.
* Laserbox design adjusted in accordance with suggestions from Will. All components will be delivered 27/08/2019. Ready for assembly will be end of next week. (While laser cutter is closed)
* 3D-printer fixed (was broken)
* Renders made for progress report and for presentation
* Design Laser Alignment Tool revised, going to 3D print it initially (as discussed with Jan) in order to verify correct tolerances and see if it works.

# Other business

* Some graduation presentations of friends this week, which I promised to attend
* Nisse will be back on the 02/09/2019, Jan will leave on this date and will be back on the 09/09/2019.

# Plans for next week(s)

* Take a look at design DM setup from Alice. Differences can be found in Appendix. Try to understand why the setup is made as it is.
* Take a look at the mechanical design from Alice. Try to understand why the components are designed in a certain way.
* Make more renders for the presentation, this in collaboration with Carlas.
* Make 3D printable model for the collimator alignment tool.
* Make drawings of the Linear mirror stage for production.

# Appendix

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| x | TIRF-Setup | DMD-Setup | Light Sheet Setup | Agreements about production |
| Basemodule (Microscope Tower + overage componentent) | Microscope Tower - | 🡨 Idem | 🡨 Idem | End of September finished and anodized |
| BottomPlate - |
| EM Plate - |
| FilterPlate - |
| CoverPlate - |
| Illuminatie pad | Linear Mirror Stage | Yet undefined | Yet Undefined | Files I’ll send before Jan is back (09/09/2019) |
| Collimator Alignment Tool - |
| Emission pad | Tube Lens Mount - | 🡨 Idem | 🡨 Idem | - |
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| DMD-Setup TK003 | DMD-Setup Alice |
| DMD: Vialux V9601  Pitch: 10.8 microns | DMD: TI DLP6500FYE  Pitch 7.6 microns |
| Collimation: Done with mirror | Collimation: Done with Lens (L3 – f=20mm) |
| Excitation Lens: f = 500mm | Excitation Lenses:  L4 – f = 200mm  L5 – f = 100mm  L6 – f = 150mm |
| Objective: UPLSAPO60XO – 1.35NA | Objective: UPLSAPO60XO – 1.35NA |
| Emission Lens – f = 180mm | Emission Lens:  L7 – f = 250mm |
| Camera: Andor Zyla 4.2  Pixel Size: 6.5 microns | Camera: IDSuEye Rev. 2  Pixel Size: 5.86 microns |

A circuit board

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