**Nadia's responsibilities**

1. Finish task assignment by 12/02/17. Send the assignment to Dror and Leo.
2. Initial checks: Install the ITKSnap program, and use it to perform a few segmentation according to the supplied instructions.
   1. Check that instructions are clear.
   2. Check that there are no technical problems with ITKSnap program.
3. Have a meeting with Dror by 12/02/17:
   1. Approve that the instructions are clear.
   2. Determine the Windowing condition for each case.
4. Keep track of times, make sure that every radiologist finish his/her tasks on time.
5. Technical support for radiologists if needed.
6. Support Dror in the results validation process (he may have questions about correctness of certain annotations).
7. Update radiologists in case they need to perform corrections in their annotations, and make sure that they do it.

**Time Schedule**

Finish by Sunday, 12/2/17

- opening meeting (Nadia, Dror and Leo).

- Radiologists recruitment and task assignment.

- Nadia and Dror go over the materials. Nadia approves that instructions are clear, and decides on Windowing for each case

Finish by 14/2/17, Tuesday

* 1 hour session with Dror and Nadia.

Finish by 21/2/17, Tuesday

* Radiologists who are assigned for two tasks complete their first task.
* Radiologists who are assigned for one task completes 50% of it.
* The annotations are sent to Nadia and passed to Dror.

Finish by 23/2/17, Thursday

* Dror validates the annotations. Send correction through Nadia if needed.

Finish by 28/02/17, Tuesday

* All radiologists finish their tasks. The annotations are sent to Nadia and passed to Dror.

Finish by 02/03/17, Thursday

* Dror validates the annotations. Send correction through Nadia if needed.

Finish by 09/03/17, Thursday

* Corrections are made (in case that Dror found errors).

**Work load**

The tasks are divided into two types:

* Group 1: annotating a few slices for each case.   
  Total number of slices: 80. Approximated time: ~ 2 hours.
* Group 2: annotating full 3D segmentation of tumors, and more slices of kidney contour.

Total number of slices: 344. Approximated time: ~ 8 hours.

Denote T1, …, T10 as 10 annotation tasks, to be assigned to different radiologists.

T1: Group1. Assigned to: \_\_\_\_\_\_\_\_\_\_

T2: Group1. Assigned to: \_\_\_\_\_\_\_\_\_\_

T3: Group1. Assigned to: \_\_\_\_\_\_\_\_\_\_

T4: Group1. Assigned to: \_\_\_\_\_\_\_\_\_\_

T5: Group2. Assigned to: \_\_\_\_\_\_\_\_\_\_

T6: Group2. Assigned to: \_\_\_\_\_\_\_\_\_\_

T7: Group2. Assigned to: \_\_\_\_\_\_\_\_\_\_

T8: Group2. Assigned to: \_\_\_\_\_\_\_\_\_\_

T9: Group2. Assigned to: \_\_\_\_\_\_\_\_\_\_

T10: Group2. Assigned to: \_\_\_\_\_\_\_\_\_\_

One radiologist may do 2 tasks. In this case, after finishing the first task, he/she needs to wait 3 days before doing the second one.

**Group 1: 4 radiologists, 80 slices each**

4 radiologists will do 79 slices, 2 hours.

Liver tumors: 5 cases, 27 slices

* FU1 – z=15,20,25,31,36,41

Initial Point: (x=48,y=117,z=15)

* FU2 – z=72,74,77,79

Initial Point: (x=39,y=70,z=72)

* FU4 – z=31,33,35,38

Initial Point: (x=211,y=152,z=31)

* FU5 – z=31,35,39,43,94,95,96**,**99

Initial Point1: (x=43,y=61,z=31), Initial Point2: (162,148,94)

* FU7 – z=114,118,122,126,130

Initial Point: (x=87,y=127,z=114)

**Notice: In this example (FU7), some slices contains two tumors – you only need to segment one of them, according to the initial point location.**

Lung Tumors: 5 cases, 24 slices

* case3\_21\_11\_2010 – z=55, 60, 65, 72, 76

Initial Point: (x=84,y=76,z=55)

* case4\_27\_08\_2012 - z=44,48,52,56, 60

Initial Point: (x=111,y=222,z=52)

* case5\_27\_08\_2012 - z=120,123,126,130

Initial Point: (x=46,y=111,z=120)

* case10\_18\_10\_2012 – 30,32,34,35

Initial Point: (x=57,y=156,z=30)

* case11\_20090906 – z=110,115,119,123,129,130

Initial Point: (x=131,y=70,z=110)

Left Kidney contour – 6 cases, 28 slices

* 10000100\_1\_CTce\_ThAb.z=190,200,210,217,226

Initial Point: (x=141,y=321,z=180)

* 10000104\_1\_CTce\_ThAb**.** z=207,221,235,249

Initial Point: (x=160,y=305,z=207)

* 10000105\_1\_CTce\_ThAb**.** z=200,210,220,230

Initial Point: (x=146,y=294,z=200)

* 10000109\_1\_CTce\_ThAb. z=192,203,208,215,221

Initial Point: (x=152,y=284,z=192)

* 10000111\_1\_CTce\_ThAb.z=197,202,212,222,227

Initial Point: (x=149,y=333,z=197)

* 10000112\_1\_CTce\_ThAb.z=190,195,203,211,217Initial Point: (x=143,y=313,z=190)

**Group 2: 6 radiologists, 344 slices each**

6 radiologists will do 344 slices.

Liver tumors: 5 cases, 127 slices

* FU1 – from z=7, to z=47.   
  Initial Point: (x=42,y=117,z=7)
* FU2 – from z=67 to z=81.   
  Initial Point: (x=41,y=65,z=69)
* FU4 – from z=30 to z=39.   
  Initial Point: (x=215, y=145,z=30)
* FU5 - from z=90 to z=101. Also, from z=26 to z=46.   
  Initial Point 1: (x=161, y=150, z=90) Initial Point2: (x=42,y=57,z=28)
* FU7 – from z=109 to z=136.   
  Initial Point: (x=82,y=118,z=136)

**Notice: In this example, some slices contains two tumors – you only need to segment one of them, according to the initial point location.**

Lung tumors: 5 cases, 155 slices

* case3\_21\_11\_2010. z=41 to z=83.   
  Initial Point: (x=112,y=97,z=79)
* case4\_27\_08\_2012. z=30 to z=66.   
  Initial Point: (x=113,y=230, z=39)
* case5\_27\_08\_2012. z=113 to z=139.   
  Initial Point: (x=44,y=114, z=119)
* case10\_18\_10\_2012. z=27 to z=36.   
  Initial Point: (x=63,y=158, z=29)
* case11\_20090906. z=103 to z=140.   
  Initial Point: (x=139,y=49,z=136).

Left kidney contour. 6 cases 62 slices

* 10000100\_1\_CTce\_ThAb.z=170,175,180,185,190,195,200,205,210,215,217,220,226  
  Initial Point: (x=173,y=337,z=226)
* 10000104\_1\_CTce\_ThAb. z=207,214,221,228,235,242,249,256,263,270,277

Initial Point: (x=175,y=346,z=277).

* 10000105\_1\_CTce\_ThAb. z=190,200,210,220,230,240

Initial Point: (x=139,y=311,z=190).

* 10000109\_1\_CTce\_ThAb. z=192,195,198,201,203,208,210,213,215,218,221.

Initial Point (x=142,y=290,z=192)

* 10000111\_1\_CTce\_ThAb.z=197,202,207,212,217,222,227,232  
  Initial point: (x=172,y=354,z=197).
* 10000112\_1\_CTce\_ThAb.z=186,190,192,195,198,201,203,207,211,213,217,219,222  
  Initial Point: (x=173,y=321,z=186).