



### **COST Action CA16103**

Magnetic Resonance Imaging Biomarkers for Chronic Kidney Disease (PARENCHIMA)

#### **Minutes**

Workung Group 2 Meeting  
2017-10-13

Present: Angel Bayarri, Susmita Basak, Peter Rogelj, Arvid Lundervold, Alexander Lundervold, Steven Sourbron, Susan Buchanan, Marek Kochinski, Graham Galloway, Erling Anderson, Fritz Schick, Marc Fischer, Luke Xie, Frank Zöllner

Actions **highlighted**

1. **Introduction to WG 2 in planary session (Frank):**
  - a. Suggestion of Task Forces and Roles
2. **Discussion on Task Forces (Database, Software, Challenge)**
  - Database
    - Disusccion systems (QUIMBIM , XNAT)
    - Presentation of QUIMBIN
    - More information about database system is needed
      1. Testing of QUIMBIM (Susmita, Susan)  
Results to be reported til 31.12.2017
      2. Feedback and experiences from other systems? (contributions from WG2 members welcome)
  - Algorithms
    - Presentation of results of the software list and initial categorisation by Marek, Barbara and Andrej (list will be distributed with the minutes). **The team keeps maintaining the list.**
    - Substructure because of wide variety is needed:
      1. Registration (Peter)
      2. Segmentation (Arvid)
      3. Modeling (Susan/Nottingham)

- Each of the three algorithm teams prepares a working plan with a goal to define procedure for method evaluation considering specific biomarker tasks, till 31.12.2017.

The proposed approach is:

1. Selection of tasks to be tested
  2. Preparation of test data with ground truth
  3. Definition of evaluation criteria
  4. Obtaining results of different algorithms (provided by users of those algorithms, not the members of the algorithm team)
  5. Evaluation of algorithm results
  6. Inform users of advantages and limitations of different methods.
  7. Preparation of open challenges (with support of the challenge team, see below)
- Challenges as mean to evaluate software in renal MRI
    - Contributors needed to take part in this
    - Example of challenges [grand-challenge.org](http://grand-challenge.org)
      1. free to host challenges in this setting
      2. good resource to learn how to set up a challenge
    - Maybe to tie up with a conference in medical image processing or imaging for a larger reach?
    - Compile a paper from the results?

### 3. Other points

- WG2 members shall consider STSMs as a home or host institution.
- Next meeting tbd after MC meeting in the next funding period,
- general assembly with presentation of WG results next year same time, place Prague, details will follow