**Minutes from AFGen call on October 12, 2016**

**Attending:**

|  |  |
| --- | --- |
| **AGES** | Albert |
| **AFNET/KORA** |  |
| **ARIC** | Alvaro |
| **CHS** | Susan |
| **WGHS** |  |
| **FHS** | Honghuang, Emelia |
| **Gutenberg** |  |
| **HABC** |  |
| **Ship** |  |
| **Cleveland Clinic** | Jonathan, John |
| **WHI** | Dan |
| **Luric** |  |
| **Malmo** |  |
| **MESA** | Henry |
| **Rotterdam** |  |
| **MGH** | Ingrid, Lu-Chen, Mark, Olivia, Steve, Patrick, Carolina, Seung Hoan |
| **Prevend** |  |
| **Prosper** |  |
| **Vanderbilt** | Ben |
| **Korean AF network** |  |
| **Generation Scotland** |  |
| **Beat-AF** | Sebastien |
| **BioMe** |  |
| **ULSAM/Epihealth/ Pivus/Twingene** |  |
| **FINCAVAS** |  |
| **Heinz Nixdorf** |  |
| **DDCHS** |  |
| **Sao Paulo** |  |
| **Munich WTCC stroke** |  |
| **Metastroke** |  |
| **Geisinger** |  |
| **UCL** |  |
| **Mayo** |  |
| **PR interval** |  |
| **Estonia biobank** |  |
| **Copenhagen City Heart Study (CCHS)** | (Christina) |
| **Intermountain** | Michael |

**Agenda**

**Ongoing projects**

* 1000G AF meta / Exome chip – Ingrid/Patrick
  + The editor has informed us that they have decided to send out the manuscript for review.
* The druggable genome – JP Casas
  + No updates.
* Genetic Risk Score for Recurrence after AF Ablation - Ben/Steve
  + Phenotypes done – waiting for genotypes.
* MR projects
  + Lipids and AF – Michalis
  + Thyroid free T4 level and AF – Christina/Dan
    - Most of individual studies have submitted their results – MDCS, Baependi Heart Study, and Vanderbilt outstanding (*Email update from Christina during AFGen call*)
    - Will start analytical part when received results from pending studies
    - Expect to have preliminary meta-analysis results in December (*Email update from Christina during AFGen call*) .
  + Alcohol and AF – Jorge
    - No updates
  + AF risk factors – Lu-Chen/Steve
    - Presentation of results – slides also circulated to all by Lu-Chen.
    - Genetically determined BP and BMI significantly associated with AF
    - Preparing manuscript now and will distribute to study leads for review
* Broad AF project – Steve/Carolina
  + Present preliminary results using 1000G imputation on one of the upcoming calls.
  + HRC imputation approved for all studies. Mark and Carolina will initiate the imputation.
  + With such a large dataset, it may be interesting to explore other phenotypes and those who have contributed data may receive an email asking for other phenotypes after the AF analyses have been completed.
* TOPMED WGS project AF – Patrick/ Steve
  + Callsets back from Michigan and Broad
  + Largest dataset from Broad – Seung Hoan, Honghuang, Steve, and Kathy have been working on the QC part - will turn to analytical part soon.
  + Will prepare some slides regarding the QC process and present on a call soon.

**New projects**

* Heritability of AF – Lu-Chen/Steve
  + Lu-Chen presented a project she has been working on to estimate heritability using genome-wide SNP level data
  + Used the UK Biobank - 150 K individuals (~3K with AF)
  + ~22% of AF heritability can be explained by additive genetic variation– mainly from common variants with MAF >5%
  + Additional findings and substrata discussed as included in slides
  + Feel free to reach out to Lu-Chen if you have any questions

**Next call:** October 26, 2016