# Humane adipocytter - transkriptionelle netværksændringer i forbindelse med overvægt

*A Data Management Plan created using DMPonline*

**Creators:** Victoria Mikkelsen, Ann-Britt Marcher, First Name Surname

**Affiliation:** Syddansk Universitet / University of Southern Denmark

**Template:** Novo Nordisk Foundation

**ORCID iD:** https://orcid.org/0000-0002-0961-5787

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## Data Collection

RNA-sequencing, single nuclei RNA-sequencing and ATAC-sequencing (open genomic regions) data from isolated human adipocytes.

Biopsies will be taken by following collaborators:

Professor, overlæge og forskningsleder Filip K. Knop, Center for Klinisk Metabolisk Forskning, Herlev og Gentofte Hospital, Gentofte Hospitalsvej 7, 3. sal, DK-2900 Hellerup. Email: filip.krag.knop.01@regionh.dk. Tlf.: +45 38674266

Overlæge Søren Lykke Deigaard, Afdeling for Mave-, Tarm- og Leversygdomme, Herlev og Gentofte Hospital, Herlev og Gentofte Hospital, Gentofte Hospitalsvej 2, DK-2900 Hellerup.

Email: soeren.lykke.deigaard@regionh.dk. Tlf.: +45 38689877

Lektor, overlæge, dr. med. Frederik Helgstrand, Kirurgisk afdeling, Sjællands Universitetshospital, Lykkebækvej 1, DK-4600 Køge. Email: freh@regionsjaelland.dk. Tlf.: +45 47323092

The samples will be processed at SDU by

Postdoc Tania Paloma Quesada-Lopez, Center for Adipocyte Signaling, Inst. Biokemi og Molekylærbiologi, Syddansk universitet, Campusvej 55, DK-5230 Odense M. Email: qtania@bmb.sdu.dk. Tlf.: 6550 9365

Ph.D-student Victoria Askov Mikkelsen, Center for Adipocyte Signaling, Inst. Biokemi og Molekylærbiologi, Syddansk universitet, Campusvej 55, DK-5230 Odense M. Email: victoria@bmb.sdu.dk. Tlf.: 4242 0788

Genetic material will be extracted and subjected to subsequent sequencing in the Illumina or 10XGenomics platforms

## Documentation and Metadata

1)List of subject characterization:
- Sample from which adipose depot (subcutaneous or visceral)
- Age
- Etnicity
- Gender
- Menopause status
- Waist radius (cm)
- Blood pressure og pulse (mm Hg)
- Weight (kg)
- Highth (cm)

2)Written consents for biopsy extraction

3) Scheme of comorbidities:
- diabetes mellitus
- hypothyroidism
- Hypertension
- Depression
- hypercolesterolemia
- hypertriglyceridemia
- cardiovascular diseases
- Apnea
- Cronic kidney failure
- Autoimmune diseases

- Previous kirurgical procedures
- Previous gastrointestinal diseases

4) List of medication (prescribed or not)

5) Standard blood sample parameters

- Nutritional status (hemoglobin, magnesium, zink, phosphate, ferritin, iron, albumin. D-vitamin, nitrogen)
- coagulation (INR, APTT, blodplader)
- Blodlipids (totalt cholesterol, LDL, HDL, triglycerides)
- Insulin Resistens (HOMA-IR, SPICE-indeks, HbA1c, C-peptid)

## Ethics and Legal Compliance

By application to the danish bioethical comitee

The data is owned by the Mandrup research group until publishing. After publishing the rawdata accompanied by metadata (not list of consents) and scripts will be made available.

## Storage and Backup

Raw files are backed up in two servers (Solexa and Villum data server).
Processed data will be stored in the M drev for SDU employees.
In both cases SDU-IT is responsible of recovery in the event of an incident.

All data is protected under passwords, administrated by SDU-IT.
All hardware is cyrpted by SDU-IT and protected against theft.
Data wil be shared with collaborators by cypted e-mail or SDUcloud.

## Selection and Preservation

The data included in publications need to be retained in GEO (Gene expression omnibus)
Unpublished data will be saved for 6 years,
We foresee that the data will be a usefull tool to the research community to investigate signaling states of adipocytes.

Published data will be preserved in GEO, which is a public repository of sequencing data.

## Data Sharing

Data will be shared with

Professor, overlæge og forskningsleder Filip K. Knop, Center for Klinisk Metabolisk Forskning, Herlev og Gentofte Hospital, Gentofte Hospitalsvej 7, 3. sal, DK-2900 Hellerup. Email: filip.krag.knop.01@regionh.dk. Tlf.: +45 38674266

At the moment of publishing, all data will be made available to the scientific community, including list of raw files submitted to GEO, scripts and meta data.

All human data will be anonimized

## Responsibilities and Resources

The principal investogator is the overall responsible of DMP.

The PhD fellows and postdocs are responsible of safe-keeping and backup.

All necessary ressources are available before starting the project.