

ANA Futura breakfast mingle



14 June 2024

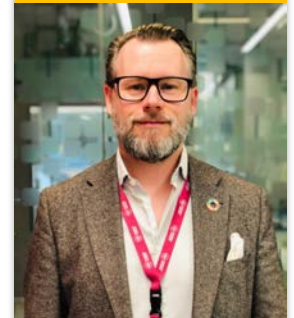
Agenda

- Welcome!
- Latest ANA Futura news – *Lars Frelin, facility manager*
- Lessons from the fire evacuation exercise – *Marjan Amiri, laboratory safety coordinator, Lars Frelin, facility manager*
- “Karolinska Institutet Stem Cell Organoid Facility (KISCO)” – *Presentation by José Inzunza, director of KISCO, Labmed*
- Questions from the staff

Latest ANA Futura news

- Update about ANA Futura's shared laboratories and equipment
- Booking system "Clustermarket"
- ANA Futura website
- Freezer facility information
- Update from the ANA Futura service team
- Next ANA Futura breakfast mingle

Facility
manager



Lars Frelin
LabMed

Update about ANA Futura's shared laboratories and equipment

- **Inventory of all shared laboratories/equipment is ongoing, with the purpose of creating:**
 - A list of equipment that we have in each shared laboratory
 - Photos of all equipment
 - Webpages for all shared laboratories and equipment
 - Updated information about lab-coordinator or equipment contact person/s
 - QR code stickers on instruments
 - Clustermarket for booking
 - User-fees
 - Service contracts

Booking system “Clustermarket”

- The booking system **Clustermarket will be used in ANA Futura for labs or instruments** not included in iLab.
- **Preparations ongoing prior to implementation:**
 - Recruitment of department representatives for a small operational work group
 - Set up the structure for Clustermarket at ANA Futura
 - Meeting with all “lab coordinators”
 - Demonstration of how to use Clustermarket “online webinar”

The ANA Futura website

Staff Portal

Log in Listen Svenska Search Menu

ANA Futura – for staff

ANA Futura is creating a leading translational integrated research environment equipped for cutting-edge research, where the boundaries between departments and clinics are torn down and researchers collaborate on the basis of common research profiles.

Liquid Nitrogen Safety Course ANA Futura house- and fire safety introduction

Menu for this area

- Support & Tools
- Building and localities ANA Futura
- Communication ANA Futura
- Work environment and safety
- Research groups in ANA Futura
- Addresses
- About ANA Futura
- If something happens

Contact information ANA Futura freezer facility

In case of a freezer alarm or a problem in the ANA Futura freezer facility

Office hours:

1. Contact the alarm recipients for the freezer that is alarming.
2. If no one answers, contact the service team: (08-524 836 41).
3. If multiple freezers are alarming, or if there is an audible alarm or lightning alarm from the room/corridor, contact the service team immediately (08-524 836 41).
4. For general problems in the freezer facility, contact the service team (08-524 836 41).

Note: If urgent problems in the freezer facility – do not send a ticket/email to the ANA Futura Service Team.

Outside office hours:

1. Contact the alarm recipients for the freezer that is alarming.
2. If no one answers, contact the facility manager or coordinator.
3. If multiple freezers are alarming, or if there is an audible alarm or lightning alarm from the room/corridor, contact the facility manager or coordinator immediately.
 1. Facility manager Lars Frelin: 070-4243001
 2. Coordinator Tommy Eklund: 076-0500405
4. For general problems in the freezer facility, contact the facility manager or coordinator immediately.

Update from the Service team

- **Staffing during summer 2024**
 - The service team will be on-site during the whole summer but with reduced number of staff.
 - Lead times for may be longer and some services may not be available.

In case of emergency

Please contact the facility manager:

Lars Frelin lars.frelin@ki.se.

08-524 836 32.

070-424 3001 (for text messages).

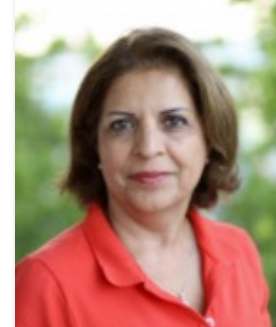
Next ANA Futura breakfast mingle!



- **Drop-in breakfast 8.30 am**
- **Meeting starts 8.45 am – 9.30 am**

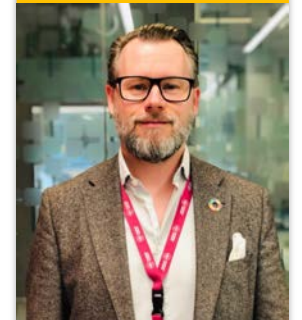
Fire evacuation exercise

Laboratory
safety
coordinator



Marjan Amiri
LabMed

Facility
manager

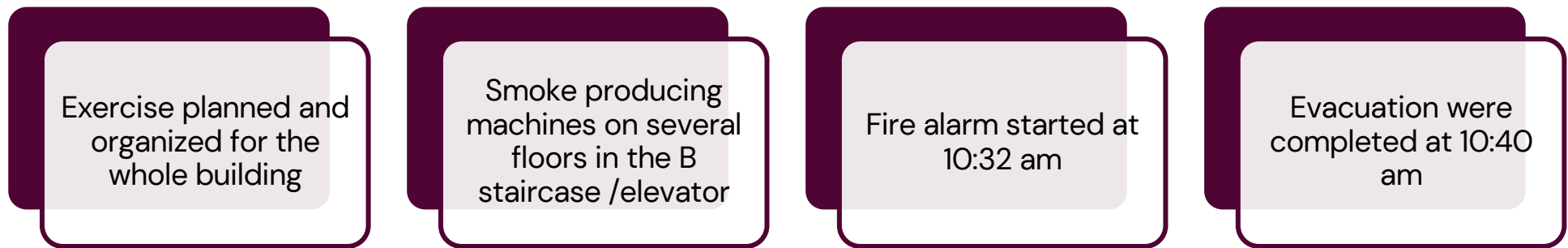


Lars Frelin
LabMed

14 May 2024



Fire evacuation exercise setup



- **Majority of staff were evacuated within 2–3 minutes**
- **During the fire evacuation exercise 20 June 2022, it took 3–4 minutes to evacuate most staff**

Observations

The evacuation went quite fast 2-3 minutes

Most staff did take the closest exit out

Only few staff members put on the fire ward west

A minority ignored the fire alarm

The fire display information was not updated with room number

Difficult to inform everyone at the assembly point

The audible alarm was quite low

A few fire doors did not close completely

What can be improved?

- A total of 42 staff members did evacuate directly through compact smoke in staircase B
 - This may have resulted in a catastrophe if it was a real fire
- Many did not take alternative evacuation routes



What to do in case of an evacuation alarm

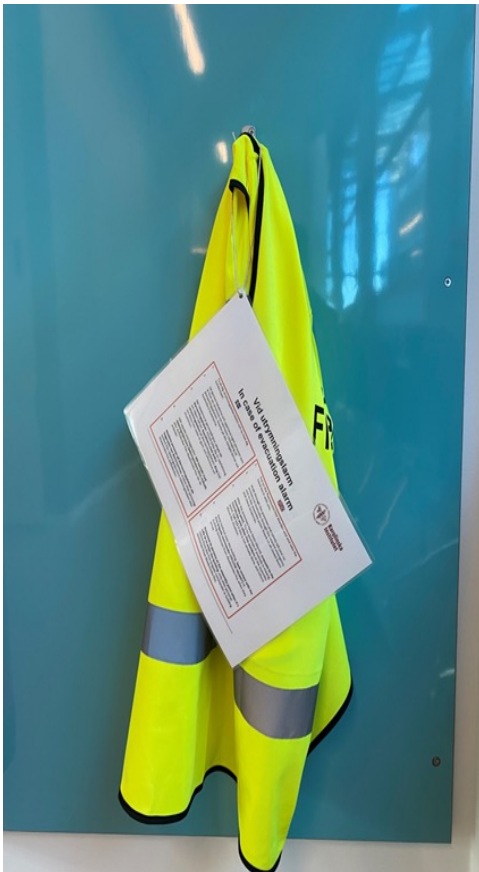
Vid utrymningslarm In case of evacuation alarm



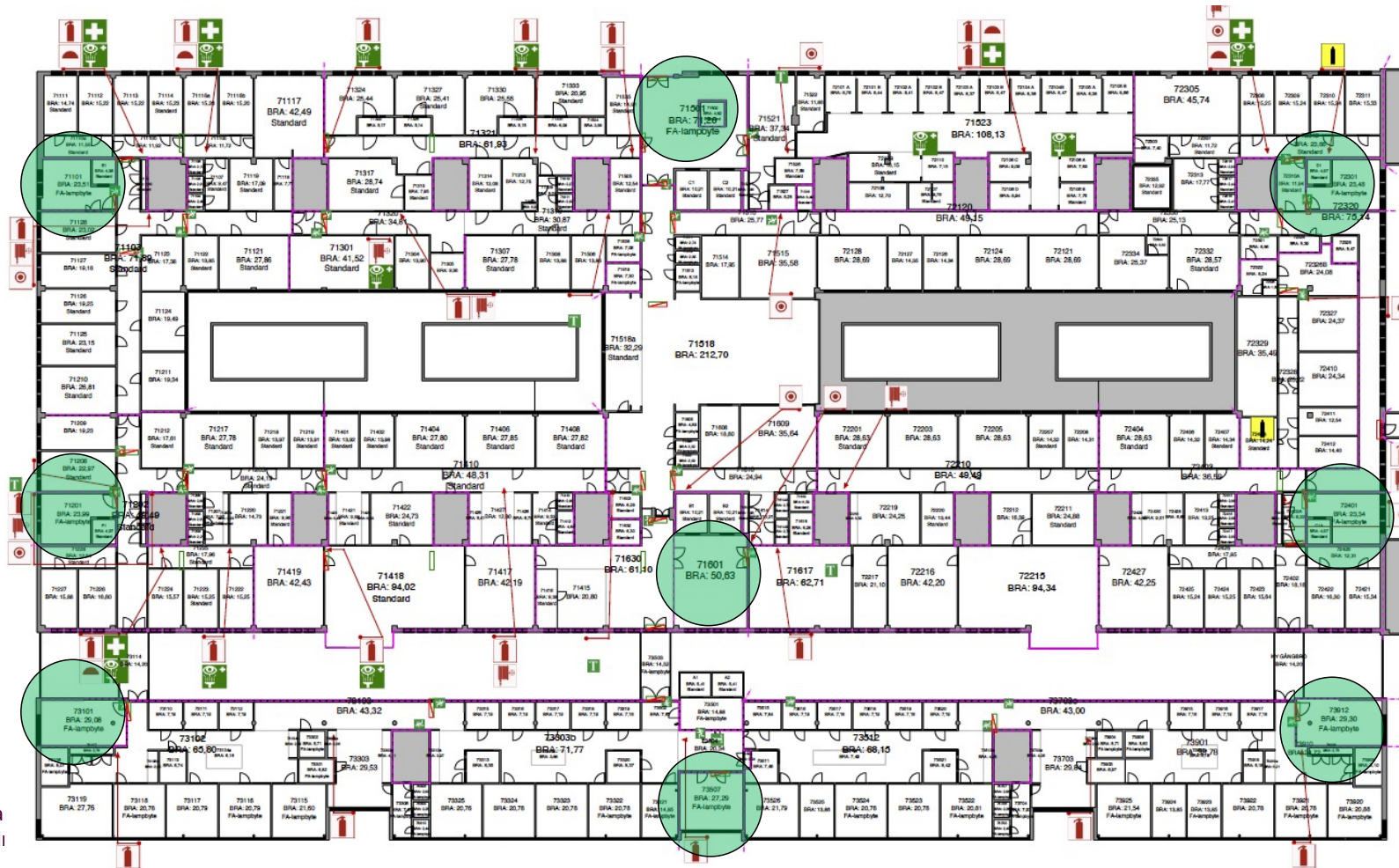
1. Ta på dig utrymningsledarvästen och ta med dig handlampan.
2. Gå igenom lokalerna och uppmana lugnt personer som är kvar att utrymma via närmaste nödutgång till återsamlingsplatsen. Knacka på alla stängda dörrar och kontrollera toaletterna.
3. När lokalerna är genomgångna, utrym till återsamlingsplatsen. Försök bilda dig en uppfattning om någon saknas. Koordinera med andra utrymningsledare på återsamlingsplatsen. Ring 112 om detta inte redan är gjort, och informera om situationen.
4. Håll uppsikt mot byggnaden. Sök kontakt med räddningstjänstens räddningsledare (GUL HJÄLM) eller drifttekniker från Akademiska Hus när de anländer.
5. Meddela personer på återsamlingsplatsen att byggnaden kan återinrymmas, endast efter personligt besked från räddningstjänstens räddningsledare eller Akademiska Hus drifttekniker.



1. Put on the fluorescent Fire Warden vest and take the hand torch with you.
2. Walk through the premises and calmly tell your co-workers to evacuate through the nearest emergency exit to the assembly point. Knock on all closed doors and check lavatories.
3. After the premises have been cleared, evacuate to the assembly point. Try to ascertain if anybody is missing. Coordinate with other Fire wardens at the assembly point. Call 112 if this is not already done, and inform about the situation.
4. Keep lookout over the building. Seek contact with the Fire brigade commander (YELLOW HELMET) or building technician from Akademiska Hus when they arrive.
5. Announce to persons at the assembly point when it's safe to re-enter the building, only after personal notice from the Fire brigade commander or building technician from Akademiska Hus.



Where can you exit the building



ANA Futura
Karolinska I

2024-06-17


16

Some proposed actions

- The knowledge about all emergency exits routes in the building needs to be improved
- More staff member need to feel confident to put on their vests and act as evacuation leader. The more people who wear the vest, the easier it will be for all evacuation leaders to act
- Remind everyone that the assembly point is on grass area (opposite to ANA 10), not on the side road, which might cause problem for traffic and passing people
- Practice how to use the megaphone so everyone can hear information given by any leader/responsible person
- Need of a refresher course about fire safety


Questions?

Laboratory
safety
coordinator



Marjan Amiri
LabMed

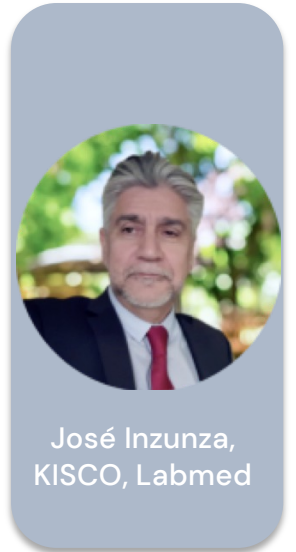
Facility
manager



Lars Frelin
LabMed

“Karolinska Institutet Stem Cell Organoid Facility (KISCO)”

- **Speaker: José Inzunza**, Associate Professor, Department of Laboratory Medicine (Labmed), Director of KISCO
- Presentation: “**Karolinska Institutet Stem Cell Organoid Facility (KISCO)**”
- Webpage: <https://ki.se/en/bionut/kisco-karolinska-institutet-stem-cell-organoid>



KISCO

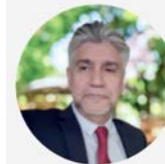


Karolinska Institutet



[KISCO – Karolinska Institutet Stem Cell Organoid](#)

[Department of Laboratory Medicine](#)



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Researcher

Email: mukesh.varshney@ki.se

Organisational affiliation: [Department of Laboratory Medicine](#)

Karolinska Institutet Stem Cell Organoid Facility (KISCO), Stockholm, Sweden

The Karolinska Stem Cell Organoids (KISCO) is a facility at the Department of Laboratory Medicine (LabMed), Campus Flemingsberg.

- **Human embryonic stem cells (hESC)**
- **Human induced pluripotent stem cells (hiPSC).**



The members of the Facility Scientific Advisory Board are Prof. [Christian G. Giske](#) (LabMed), Prof. [Kenny Rodriguez-Wallberg](#) (Onk-Pat), Prof. [Jan-Åke Gustafsson](#) (Huston University, U.S), Prof. [Ganesh Acharya](#) (CLINTEC, KI), and Dr. Carlos Villaescusa (NovoNordisk)

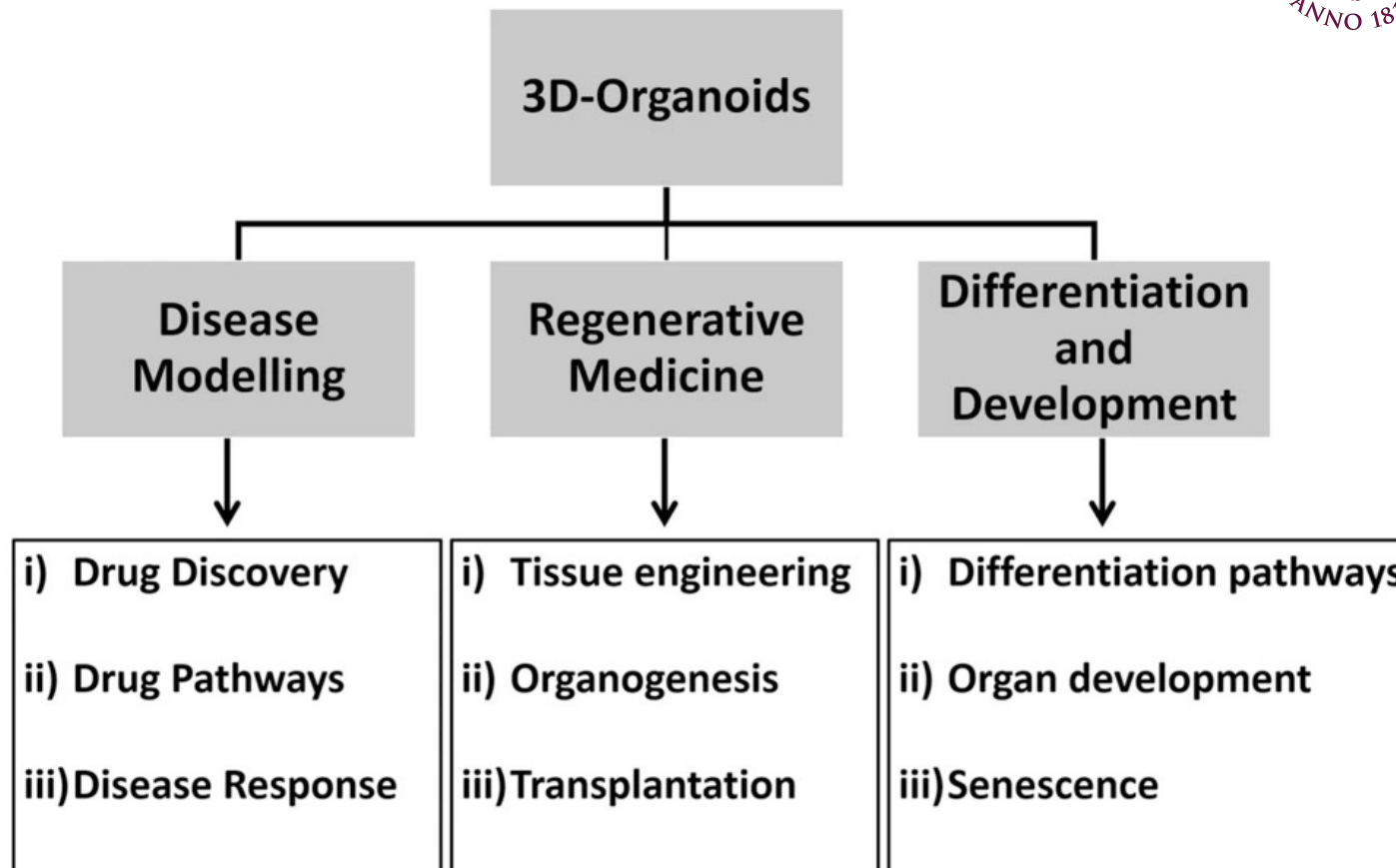
Services

- Adapting pluripotent stem cells to feeder free culture
- Characterization of pluripotent stem cells
- Cryopreservation of consolidated lineage at early passages
- Differentiation of hiPSCs toward desired lineage/cell type
- Consolidation of progenitor/ specialized cells in feeder free culture condition
- Gene editing of stem cells using CRISPR/Cas9 technology
- Transfection of cells with reporter genes (GFP, LacZ, Luciferase, etc)
- Tissue-specific organoid derivation from hiPSC or patient biopsies for in vitro assays
- Available organoid models are – area-specific brain organoids, endometrial, lung, gut, liver and bone.
- We provide advise in designing in vitro experiments.
- Hands-on training workshops
- Shipping of cryopreserved material
- **We can also work on research group specific needs and assist further in more complex experiments.**
- **Request services**
- [Request service through iLAB](#)

Various applications of 3D organoids in basic and translational research



**Karolinska
Institutet**



Eligible cells for generating organoids

- Pluripotent stem cells (ESC, iPSC)
- Fetal stem cells
- Adult stem cells (tissue specific, multipotent, progenitors)
- Biopsy material (cancer stem cells)
- Co-culture of Immortalized cells (not ideal)

Finding hiPSCs: European Bank for Induced Pluripotent Stem Cells

<https://www.ebisc.org/> (or <https://hpscereg.eu/>)



Karolinska Institutet



EMMA strain search

Alzheimer's

Status:
● Line available to order
● Only small colony available
● Under development - register interest

EMMA mouse repository

Browse by Strains | Browse by Genes | Browse curated disease models (by Disease Ontology categories) | Alzheimer's x | Alzheimer x | Alzheimer's x

Found 4 entries | Show 10 entries | Filter:

EMMA ID	Disease name / OMIM ID	gene symbol	common strain name(s)	(International) Strain Designation	Status
EM:00303	Alzheimer Disease / 104300	Psen1	PS1-/-	B6.129P2-Psen1 ^{tm1Bdes} /Cnrm	●
EM:00394	NA / NA	ApoE	apolipoprotein E KO and μMT KO	B6.129(Cg)-ApoE ^{tm1Unc} Ighm ^{tm1Cgn} /Orl	●
EM:00395	NA / NA	ApoE	apolipoprotein E KO and TCRdeltaKO	B6.129-ApoE ^{tm1Unc} Tcrd ^{tm1Mcm} /Orl	●
EM:00430	NA / NA	ApoE	apolipoprotein E KO and TCRbeta KO	B6.129P2-Tcrb ^{tm1Mcm} ApoE ^{tm1Unc} /Orl	●

Showing 1 to 4 of 4 entries | First | Previous | 1 | Next | Last

Generation of nonviral integration-free hiPS cell line

12-well plate spinning bioreactor

Stem Cell Research 51 (2021) 102193

Contents lists available at ScienceDirect

Stem Cell Research

journal homepage: www.elsevier.com/locate/scr



ELSEVIER



Lab resource: Stem Cell Line

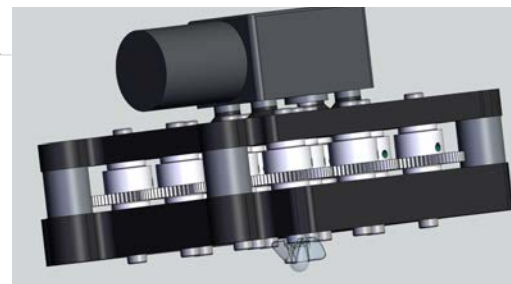
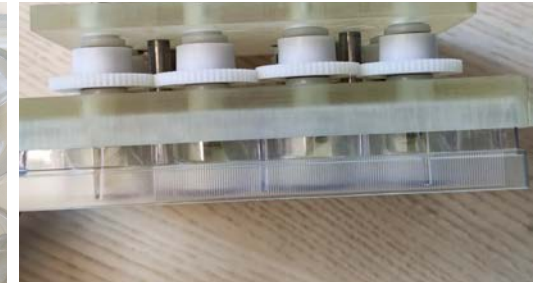
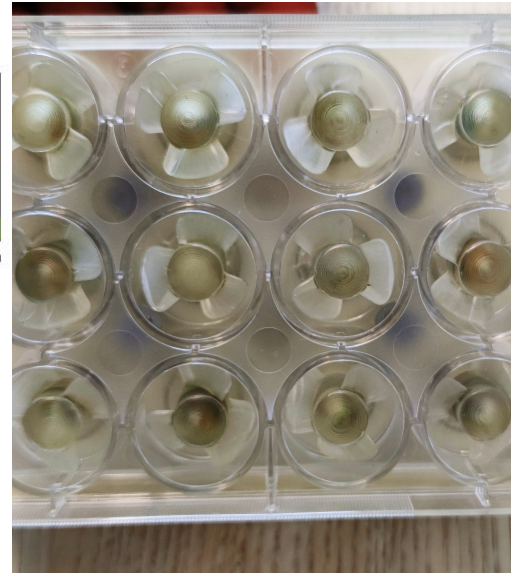
Generation of nonviral integration-free human iPS cell line KISCOi001-A from normal human fibroblasts, under defined xeno-free and feeder-free conditions

Jose Inzunza^a, Jonathan Arias-Fuenzalida^{a,b}, Juan Segura-Aguilar^c, Ivan Nalvarte^a, Mukesh Varshney^{a,*}

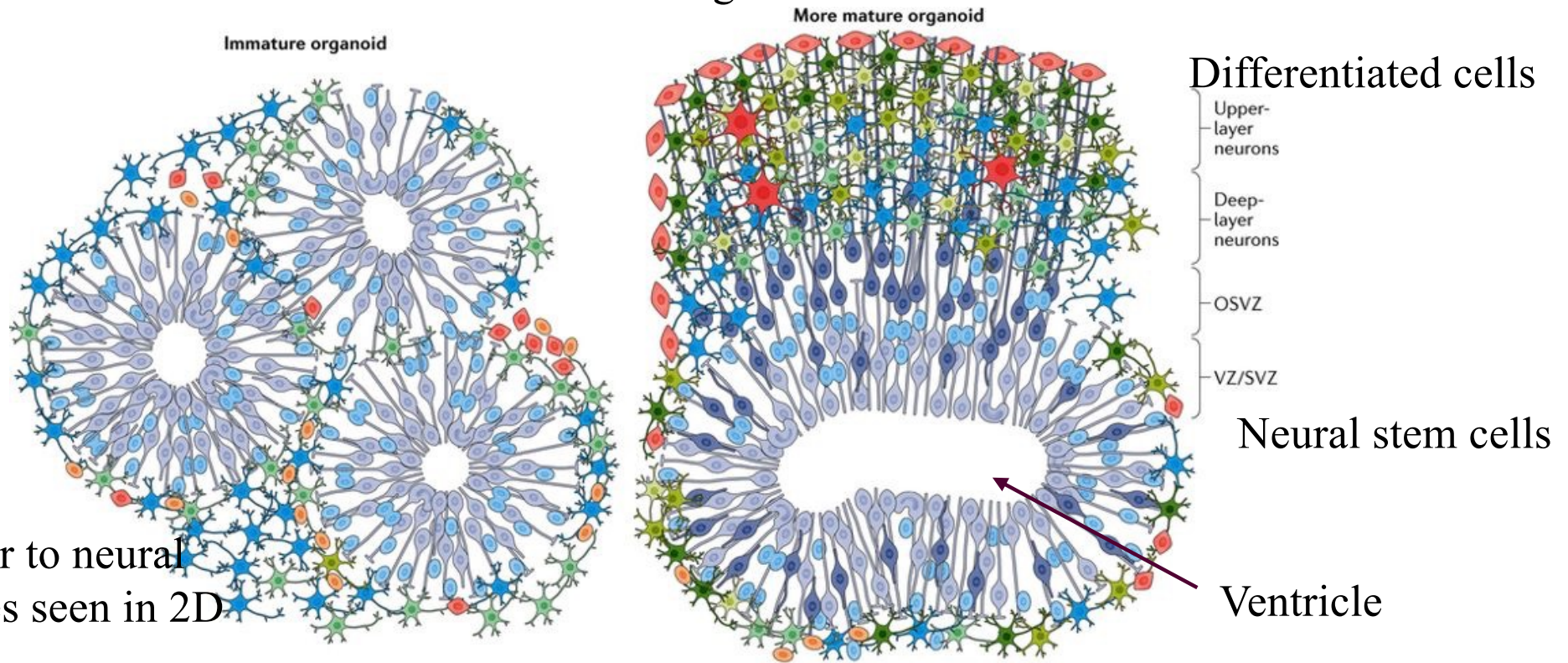
^a Department of Biosciences and Nutrition, Karolinska Institutet, Huddinge, Sweden

^b Centre for Cancer Cell Reprogramming, Institute of Clinical Medicine, Faculty of Medicine, University of Oslo, Norway

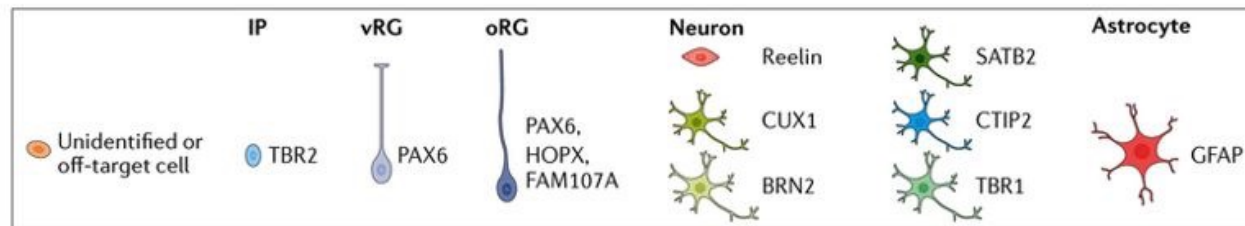
^c Molecular and Clinical Pharmacology ICBM Faculty of Medicine, University of Chile, Chile



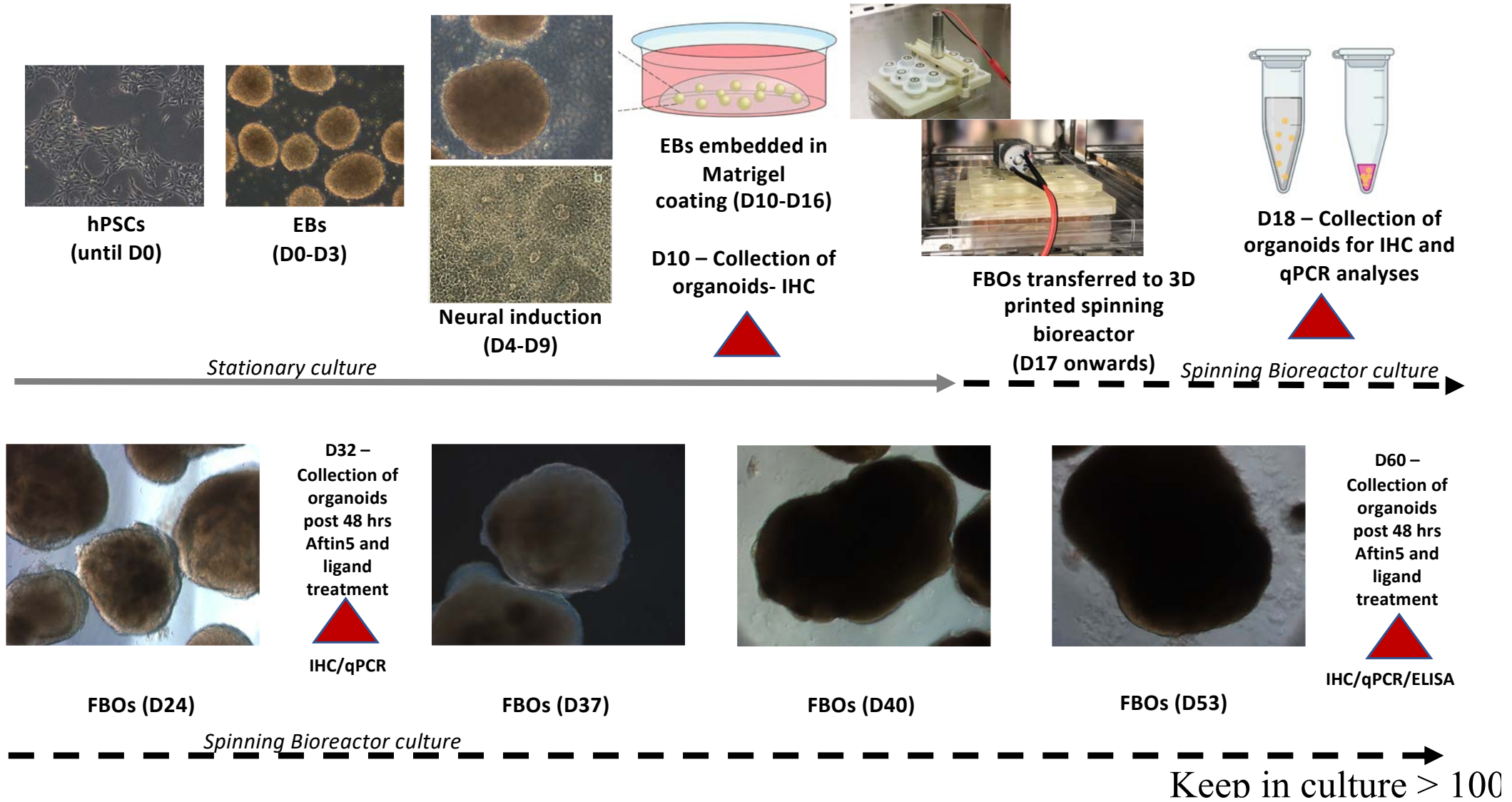
Cerebral organoid

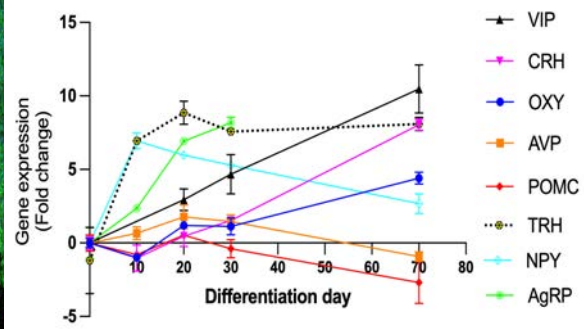
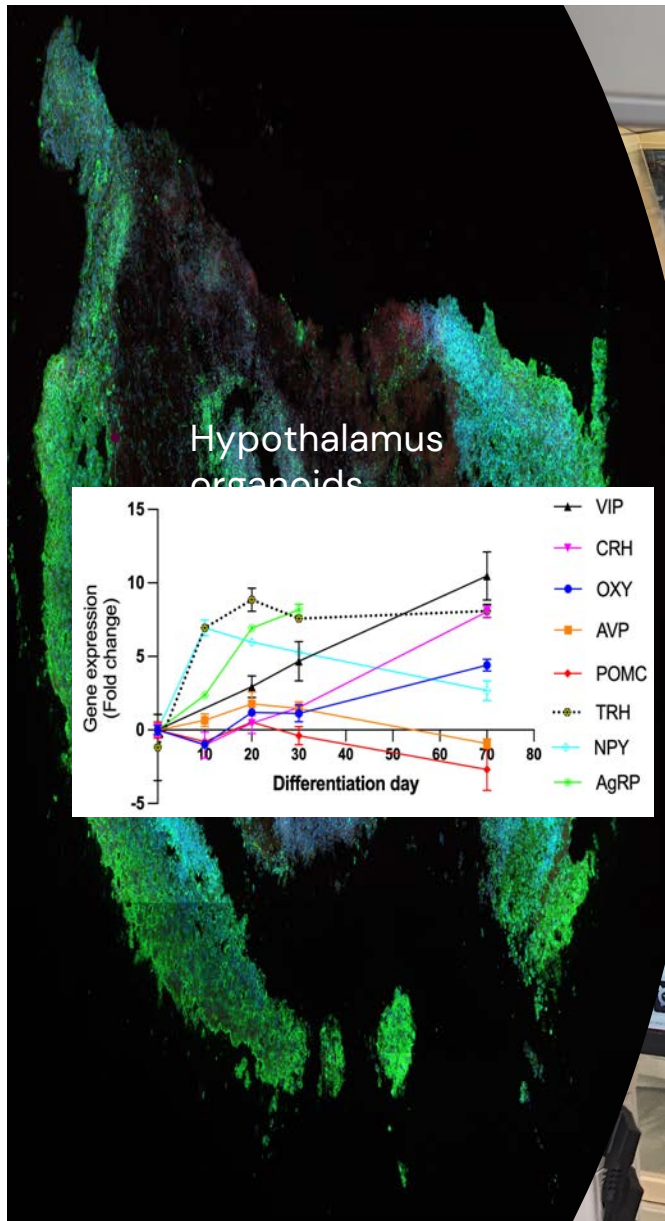


Similar to neural rosettes seen in 2D



Methodology: Forebrain organoid (FBO) culture and analysis



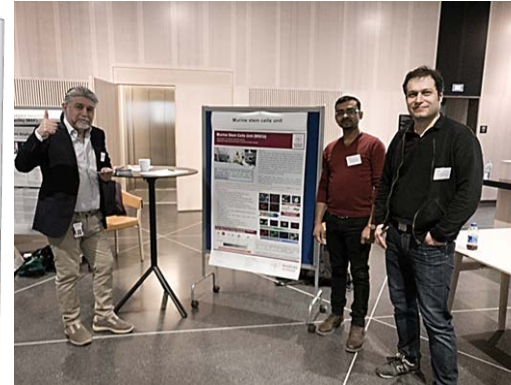


Karolinska Institutet



Electrophysiology

Karolinska Institutet Stem Cell Organoid Facility (KISCO), Stockholm, Sweden



Participation in KI Expo – Large exhibition of Facilities at Karolinska
Organizing courses and workshops on hESC/organoid tech

Courses

Also available at KI webpage

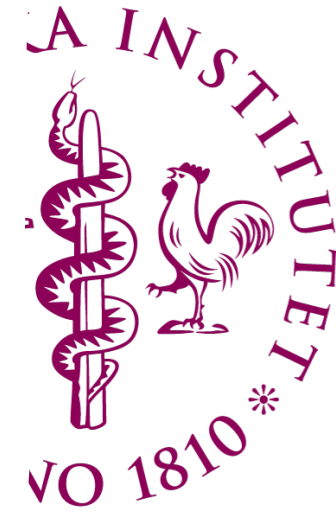
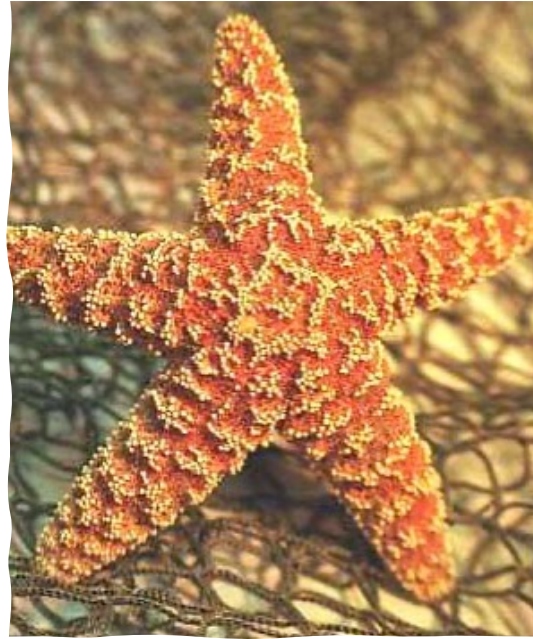
[Embryology I Course HT2024](#)

[Gene Regulation in the Early Human Embryo Course HT2024](#)

[Stem Cells and Organoids Models with Focus on Regenerative Medicine HT2024](#)

[Cryobiology in assisted reproductive technology Course HT2024](#)

Thanks!

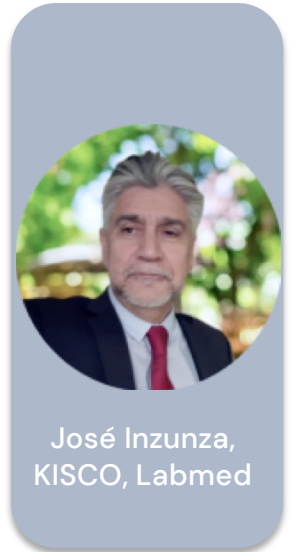


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Questions?

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Questions from the staff



ANA Futura





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