



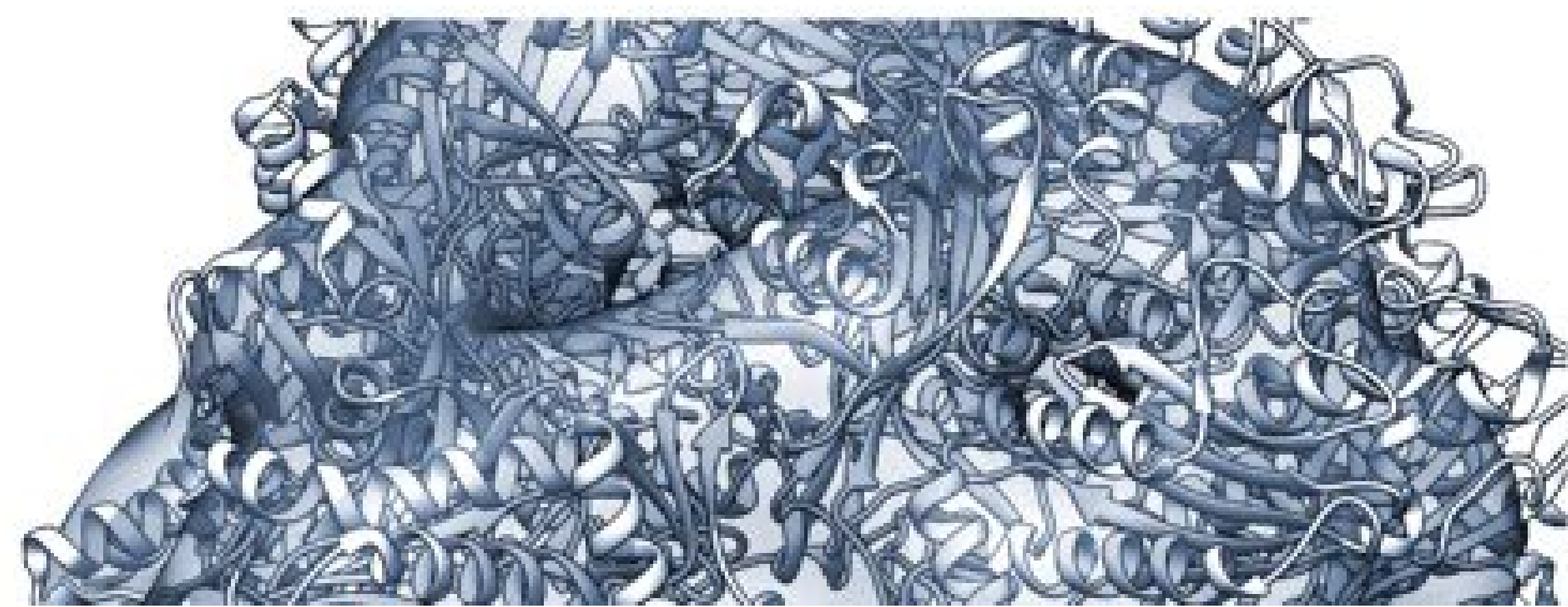
# 中央研究院低溫電子顯微鏡中心

# ASCEM

Academia Sinica CryoEM Center

ASCEM website <http://cryoem.ibt.sinica.edu.tw>

contact [cryoem@gate.sinica.edu.tw](mailto:cryoem@gate.sinica.edu.tw)



## Sample Preparation

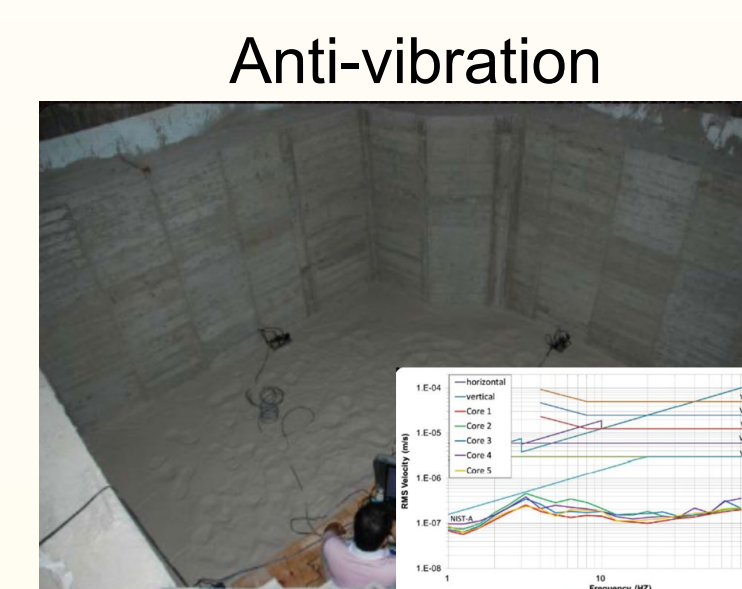


## Instruments (open to everyone)

CEM1	CEM2	CEM3	CEM4
JEM-1400	Tecni G2 F20	Talos Arctica	Titatn Krios
120kV	200kV	200kV	300kV
		Volta phase plate Autoloader	Volta phase plate Autoloader
Getan UltraScan 4000 CCD	• Getan UltraScan 4000 CCD • DE20 DDD	Falcon III CMOS Detector	Falcon III K3 CMOS Detector
Sample quality by negative staining	• Sample quality • Cryo-condition	• Screening • Data Collection	Data Collection

## Facility information

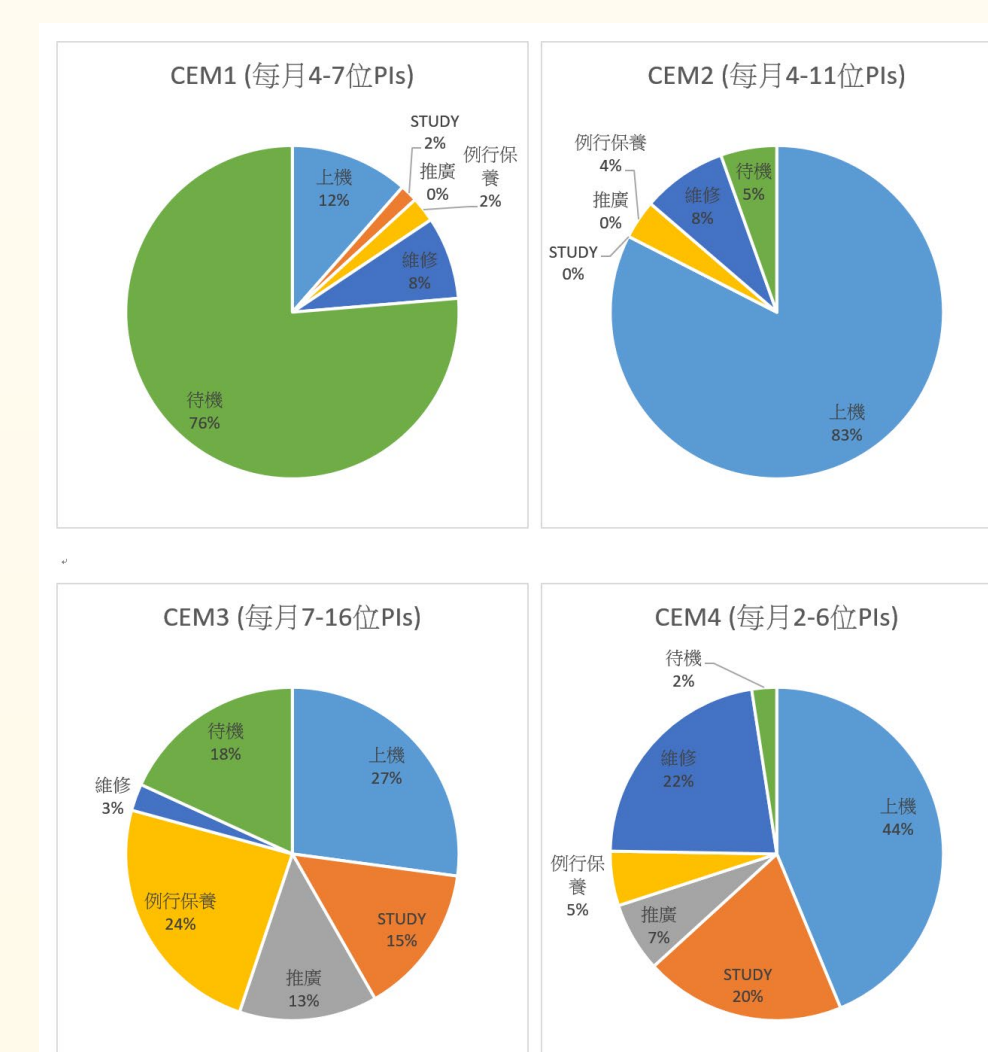
### •World class environment



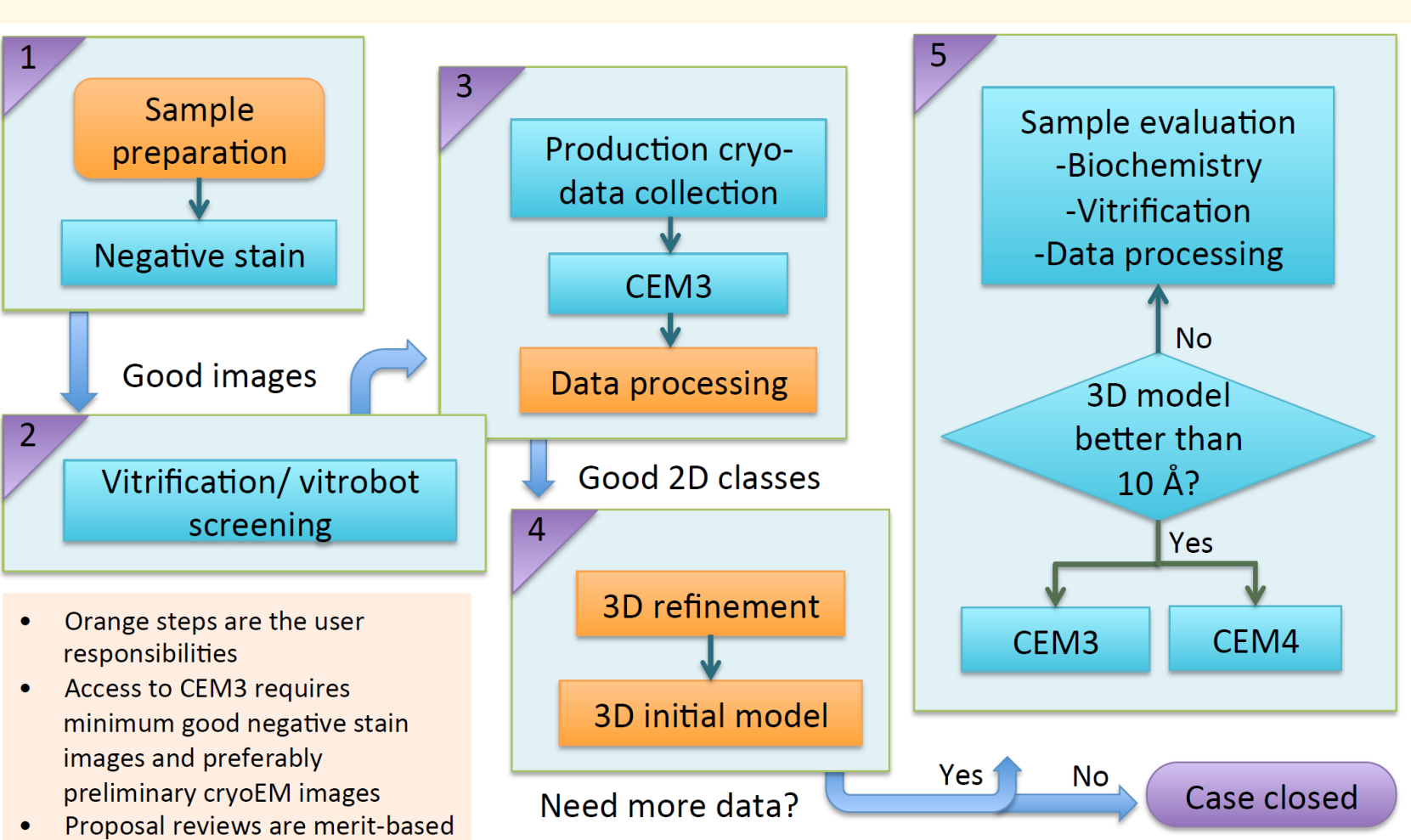
always 20% humidity 20°C



### •Current usage



## Application flowchart



### •ASCEM application (CEM3/4)

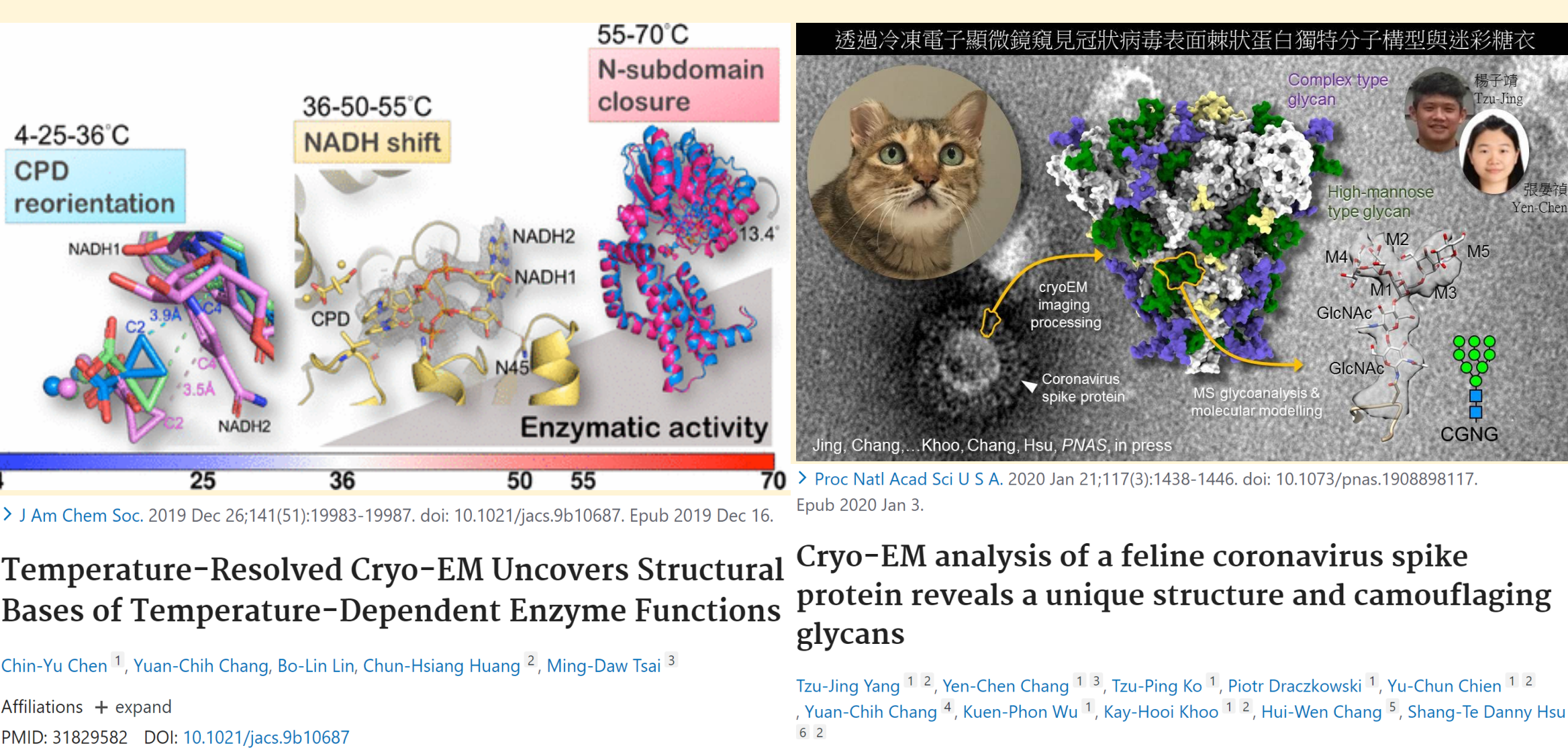
### •Approval

Once you submit the application, you will receive an email from the ASCEM management team

## Achievement



Use of Cryo-EM To Uncover Structural Bases of pH Effect and Cofactor Bispecificity of Ketol-Acid Reductoisomerase

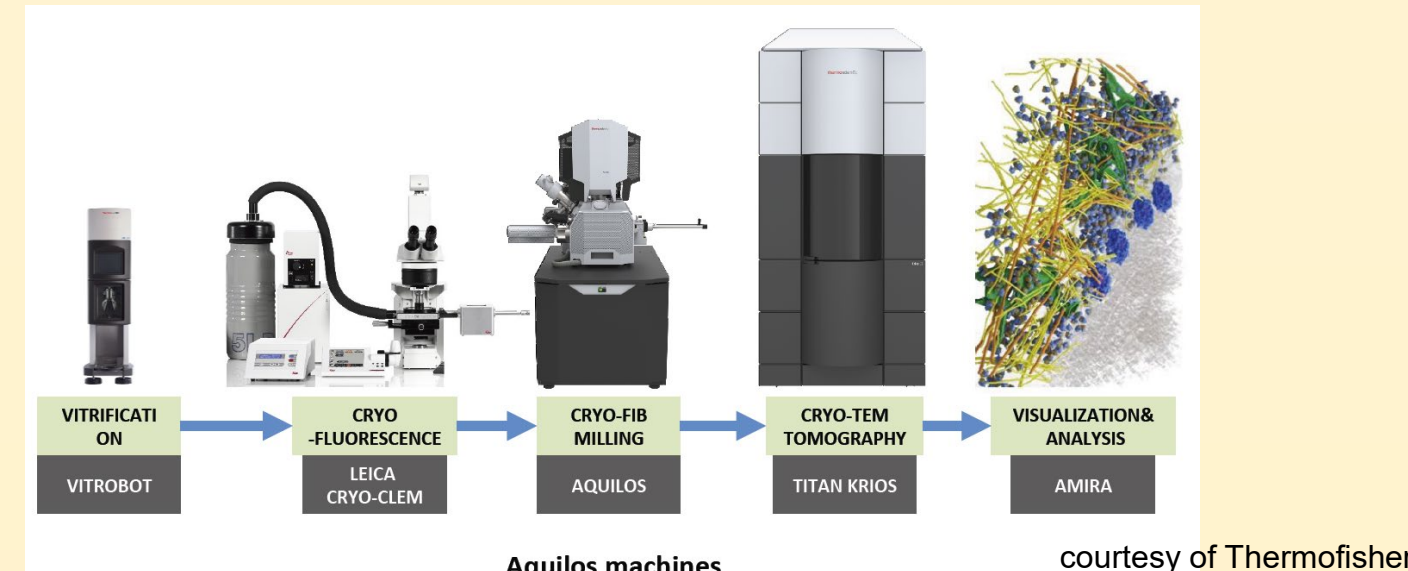


Cryo-EM analysis of a feline coronavirus spike protein reveals a unique structure and camouflaging glycans

## Ongoing development

### Electron CryoTomography

Seeing ultrastructure inside cells in the near-native state!



shrimp virus

Caulobacter

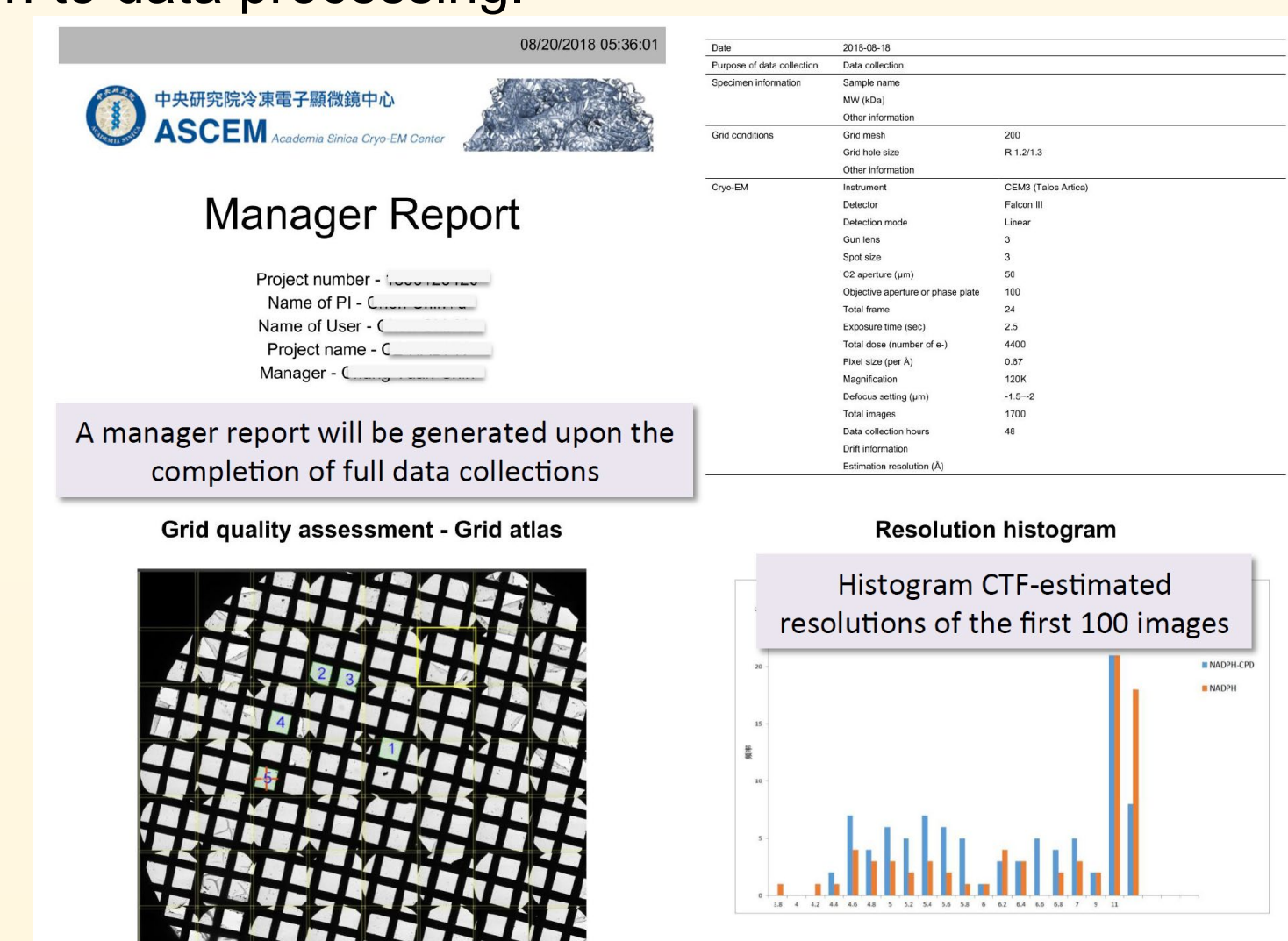
Supported by  
Hui-ju Huang  
Dr. Yuan-Chih Chang  
Dr. Chun-Hsiung Wang

# You are the One we are looking for!!

## User friendly service

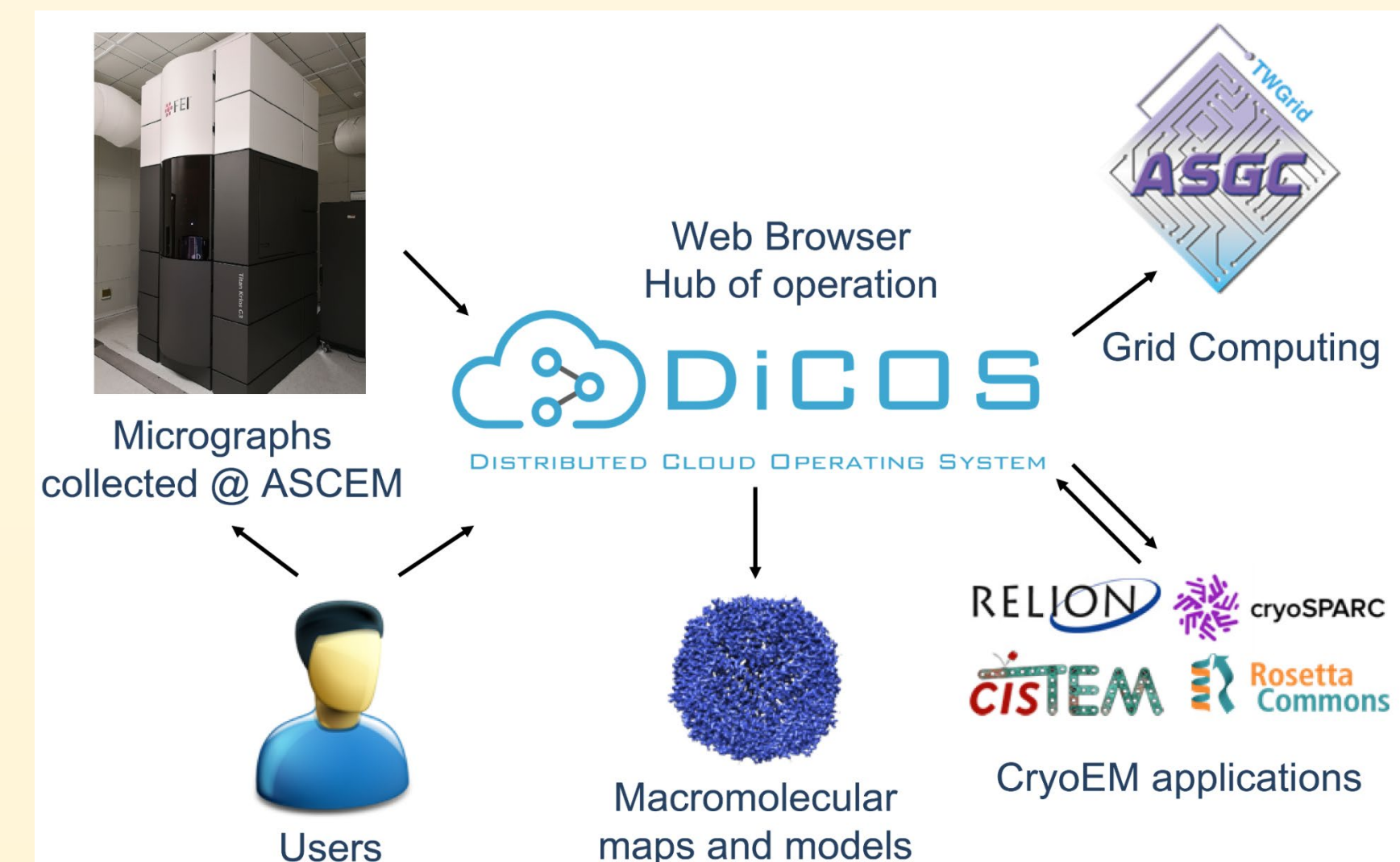
### •Project manager and report system

An dedicated project manager will assistant users from data collection to data processing.



### •Data transform and process platform

We take care of data transfer for you.



### •Cryo-EM cloud computing by DiCOS

(<https://dicos.grid.sinica.edu.tw/>)

We take care of computing resource and software installation.

