

Theory and practice in Transmission and scanning Electron Microscopy

University and
Country

Universiti Di Pisa, Italy

Date

18thjan to 26th January 2019



Theory and Practice in Transmission and Scanning Electron Microscopy

On January 13th 2019, we seven students and the associate professor from Dr. MGR Educational & Research Institute, India, embarked on a journey to the city of Pisa in Europe. We flew to this beautiful country to participate in the International winter school program 2019. This program is conducted by Universita di Pisa, Italy. The course director professor Paola Lenzi gave a warm welcome to us and she also briefed about the course module. Following this, for the next nine days we had theory as well as practice session on both scanning and transmission electron microscopy under the guidance of prof. Alessandra Falleni and A. salvetti. We had the opportunity to visit the beautiful botanical garden at the university of Pisa and also we went on an astonishing guided tour to the Anatomy Museum “Filippo Civinini” of University of Pisa which comprises around 3400 anatomical findings. On the day of course completion day we had our final evaluation test and received our certificates from the course director Prof. Paola Lenzi.



UNIVERSITÀ DI PISA
Department of Biology
Department of Clinical and Experimental Medicine
Department of Translational Research and New Technologies in Medicine in Medicine and Surgery

Pisa, 26th January 2019

To whom it may concern

This letter is to confirm the attendance of **Shriram Tharakaram** from the Dr MGR Educational Research Institute & University at the course "*Theory and practice in transmission and scanning electron microscopy*", held in Pisa from 18th to 26th January 2019.

The Director of the Course
Prof. Paola Lenzi



Paola Lenzi



UNIVERSITÀ DI PISA

Student n. 590804

Certificate n. 20183878649

Mr THARAKARAM SHRIRAM
born in CHENNAI - India - on November the 11th 1997,
enrolled in November the 24th 2018 in the programme: Winter School Theory and practice in transmission and scanning electron microscopy
for the academic year 2019/2020
and passes the following exams

26/01/2019 SUMMER SCHOOL - THEORY AND PRACTICE IN TRANSMISSION AND SCANNING ELECTRON MICROSCOPY	27/30	12
.....		

The student has earned a total of 12 credits (CFU/ECTS).

Pisa, April 9th 2019

The Manager of the Office
Dott.ssa Cristina ORSINI



UNIVERSITÀ DI PISA
Department of Biology
Department of Clinical and Experimental Medicine
Department of Translational Research and New Technologies in Medicine in Medicine and Surgery

Pisa, 26th January 2019

To whom it may concern

This letter is to confirm the attendance of **Zainaf Nisha Gani Baksh** from the Dr MGR Educational Research Institute & University at the course "*Theory and practice in transmission and scanning electron microscopy*", held in Pisa from 18th to 26th January 2019.

The Director of the Course "
Prof. Paola Lenzi





UNIVERSITÀ DI PISA

Student n. 590808

Certificate n. 20183878617

Ms GANI BAKSH ZAINAF NISHA

born in Chennai - India - on June the 28th 1999,

enrolled in November the 24th 2018 in the programme: Winter School Theory and practice in transmission and scanning electron microscopy

for the academic year 2019/2020

and passes the following exams

26/01/2019 SUMMER SCHOOL - THEORY AND PRACTICE IN
TRANSMISSION AND SCANNING ELECTRON
MICROSCOPY

27/30

12

.....
The student has earned a total of 12 credits (CFU/ECTS).

Pisa, April 9th 2019.

The Manager of the Office
Dott.ssa Cristina ORSINI



UNIVERSITÀ DI PISA

Department of Biology

Department of Clinical and Experimental Medicine

Department of Translational Research and New Technologies in Medicine in Medicine and Surgery

Pisa, 26th January 2019

To whom it may concern

This letter is to confirm the attendance of **Pooja Pushkarni Pannir Chaluvan** from the Dr MGR Educational Research Institute & University at the course "*Theory and practice in transmission and scanning electron microscopy*", held in Pisa from 18th to 26th January 2019.

The Director of the Course
Prof. Paola Lenzi





UNIVERSITÀ DI PISA

Certificate n. 20183882595

Student n. 590810

Ms PANNIR CHALUVAM POOJA PUSHKARNI
born in CHENNAI - India - on April the 24th 1998,
enrolled in November the 24th 2018 in the programme: Winter School Theory and practice in transmission and
scanning electron microscopy
for the academic year 2019/2020
and passes the following exams

26/01/2019 SUMMER SCHOOL - THEORY AND PRACTICE IN TRANSMISSION AND SCANNING ELECTRON MICROSCOPY	27/30	12

The student has earned a total of 12 credits (CFU/ECTS).

Pisa, April 15th 2019

The Manager of the Office
Dott.ssa Cristina ORSINI



UNIVERSITÀ DI PISA

Department of Biology

Department of Clinical and Experimental Medicine

Department of Translational Research and New Technologies in Medicine and Surgery

Pisa, 26th January 2019

To whom it may concern

This letter is to confirm the attendance of **Sarah Majeed Abdul Huq** from the Dr MGR Educational Research Institute & University at the course "*Theory and practice in transmission and scanning electron microscopy*", held in Pisa from 18th to 26th January 2019.

The Director of the Course
Prof. Paola Lenzi



Paola Lenzi



UNIVERSITÀ DI PISA

Student n. 590809

Certificate n. 20183878615

Ms MAJEED ABDUL HUQ RIJWANA SARAH
born in Bahrain - Bahrain - on November the 14th 1998,
enrolled in November the 24th 2018 in the programme: Winter School Theory and practice in transmission and
scanning electron microscopy
for the academic year 2019/2020
and passes the following exams

26/01/2019 SUMMER SCHOOL - THEORY AND PRACTICE IN TRANSMISSION AND SCANNING ELECTRON MICROSCOPY	27/30	12

The student has earned a total of 12 credits (CFU/ECTS).

Pisa, April 9th 2019

The Manager of the Office
Dott.ssa Cristina ORSINI



UNIVERSITÀ DI PISA
Department of Biology
Department of Clinical and Experimental Medicine
Department of Translational Research and New Technologies in Medicine in Medicine and Surgery

Pisa, 26th January 2019

To whom it may concern

This letter is to confirm the attendance of **Nithya Shree Harikumar** from the Dr MGR Educational Research Institute & University at the course "*Theory and practice in transmission and scanning electron microscopy*", held in Pisa from 18th to 26th January 2019.

The Director of the Course
Prof. Paola Lenzi



Paola Lenzi



UNIVERSITÀ DI PISA

Student n. 590808

Certificate n. 20183878618

Ms NITHYA SHREE HARIKUMAR

born in Chennai India on June the 28th 1999,

enrolled in November the 24th 2018 in the programme: Winter School Theory and practice in transmission and scanning electron microscopy

for the academic year 2019/2020

and passes the following exams

26/01/2019 SUMMER SCHOOL - THEORY AND PRACTICE IN
TRANSMISSION AND SCANNING ELECTRON
MICROSCOPY

27/30

12

The student has earned a total of 12 credits (CFU/ECTS).

Pisa, April 9th 2019

The Manager of the Office
Dott.ssa Cristina ORSINI



UNIVERSITÀ DI PISA

Department of Biology

Department of Clinical and Experimental Medicine

Department of Translational Research and New Technologies in Medicine in Medicine and Surgery

Pisa, 26th January 2019

To whom it may concern

This letter is to confirm the attendance of **Dhivya Viswanathan** from the Dr MGR Educational Research Institute & University at the course "*Theory and practice in transmission and scanning electron microscopy*", held in Pisa from 18th to 26th January 2019.

The Director of the Course
Prof. Paola Lenzi





UNIVERSITÀ DI PISA

Student n. 590782

Certificate n. 20183878654

Ms VISWANATHAN DHIVYA
born in Ambattur - India - on August the 11th 1998,
enrolled in November the 23rd 2018 in the programme: Winter School Theory and practice in transmission and scanning electron microscopy
for the academic year 2019/2020
and passes the following exams

26/01/2019 SUMMER SCHOOL - THEORY AND PRACTICE IN TRANSMISSION AND SCANNING ELECTRON MICROSCOPY	27/30	12

The student has earned a total of 12 credits (CFU/ECTS).

Pisa, April 9th 2019

The Manager of the Office
Dott.ssa Cristina ORSINI



UNIVERSITÀ DI PISA

Department of Biology

Department of Clinical and Experimental Medicine

Department of Translational Research and New Technologies in Medicine in Medicine and Surgery

Pisa, 26th January 2019

To whom it may concern

This letter is to confirm the attendance of **Raghavi Suresh** from the Dr. MGR Educational Research Institute & University at the course "*Theory and practice in transmission and scanning electron microscopy*", held in Pisa from 18th to 26th January 2019.

The Director of the Course

Prof. Paola Lenzi



Paola Lenzi



UNIVERSITÀ DI PISA

Certificate n. 20183879223

Student n. 590863

Ms SURESH BALASUBRAMANTAN RAGHAVI
born in CHENNAI - India - on November the 19th 1998,
enrolled in November the 27th 2018 in the programme: Winter School Theory and practice in transmission and scanning electron microscopy
for the academic year 2019/2020
and passes the following exams

26/01/2019 SUMMER SCHOOL - THEORY AND PRACTICE IN TRANSMISSION AND SCANNING ELECTRON MICROSCOPY	27/30	12
.....		

The student has earned a total of 12 credits (CFU/ECTS).

Pisa, April 9th 2019

The Manager of the Office
Dott.ssa Cristina ORSINI



UNIVERSITÀ DI PISA

Department of Biology

Department of Clinical and Experimental Medicine

Department of Translational Research and New Technologies in Medicine in Medicine and Surgery

Pisa, 26th January 2019

To whom it may concern

This letter is to confirm that Dr **Gomathi Kannayiram** from the Dr MGR Educational Research Institute & University participated as Mentor at the course "*Theory and practice in transmission and scanning electron microscopy*", held in Pisa from 18th to 26th January 2019.

The Director of the Course
Prof. Paola Lenzi



Paola Lenzi



Department of Biology
Department of Clinical and Experimental Medicine
Department of Translational Research and New Technologies in Medicine in Medicine and Surgery

Pisa, 26th January 2019

To whom it may concern,

This is to certify that Gomathi Kannayiram, during the *Winter School "Theory and practice in transmission and scanning electron microscopy"* held in Pisa from Friday 18th to Saturday 26th January 2019, has performed the following techniques and experimental approaches:

-processing of samples for transmission electron microscopy (TEM):

- i) fixation, dehydration, infiltration, embedding
- ii) sectioning of resin blocks with the ultramicrotome
- iii) observation of grids under transmission electron microscope

-processing of samples for scanning electron microscopy (SEM):

- i) fixation, dehydration, Critical Point Drying, metal coating
- ii) observation of samples under scanning electron microscope

The director of the course
Prof. Paolo Lenzi





UNIVERSITÀ DI PISA

Student n. 590807

Certificate n. 20183878539

Ms KANNAYIRAM GOMATHI
born in CHENNAI - India - on May the 1st 1979,
enrolled in November the 24th 2018 in the programme: Winter School Theory and practice in transmission and scanning electron microscopy
for the academic year 2019/2020
and passes the following exams

26/01/2019 SUMMER SCHOOL - THEORY AND PRACTICE IN TRANSMISSION AND SCANNING ELECTRON MICROSCOPY	30/30	12

The student has earned a total of 12 credits (CFU/ECTS).

Pisa, April 9th 2019

The Manager of the Office
Dott.ssa Cristina ORSINI