

Plastination techniques

Invited lecture by : Dr. Shama Sundar

Date:01-12-2022

Venue:Lecture hall

Department of Molecular biology

Yuvaraja college

Mysuru

Family Details



Dr. N. M. Shamasundar

BSc, MBBS, MS(Anatomy), MISP, FABP

Ex-Dean,

Faculty of Bio-Medical Sciences

JSS University, Mysore

(Working since > 36 years)

Father: (Late) Dr. N. M. Krishna (Veterinary Doctor)
Mother: (Late) N. M. Sunandamma {Body Donated}
Elder Sister: (Late) N. M. Nagamani {Body Donated}
Four (Elder) *Brothers* (All engineers)
Youngest – *Shamsundar*

Family has instituted
*"Dr. Mannar Krishna Memorial Gold Medal" in
Anatomy for students scoring highest marks*

A seminar on plastination was organized at Yuvaraja's college ,lecture hall . It is a technique or process used in anatomy to preserve bodies or body parts .

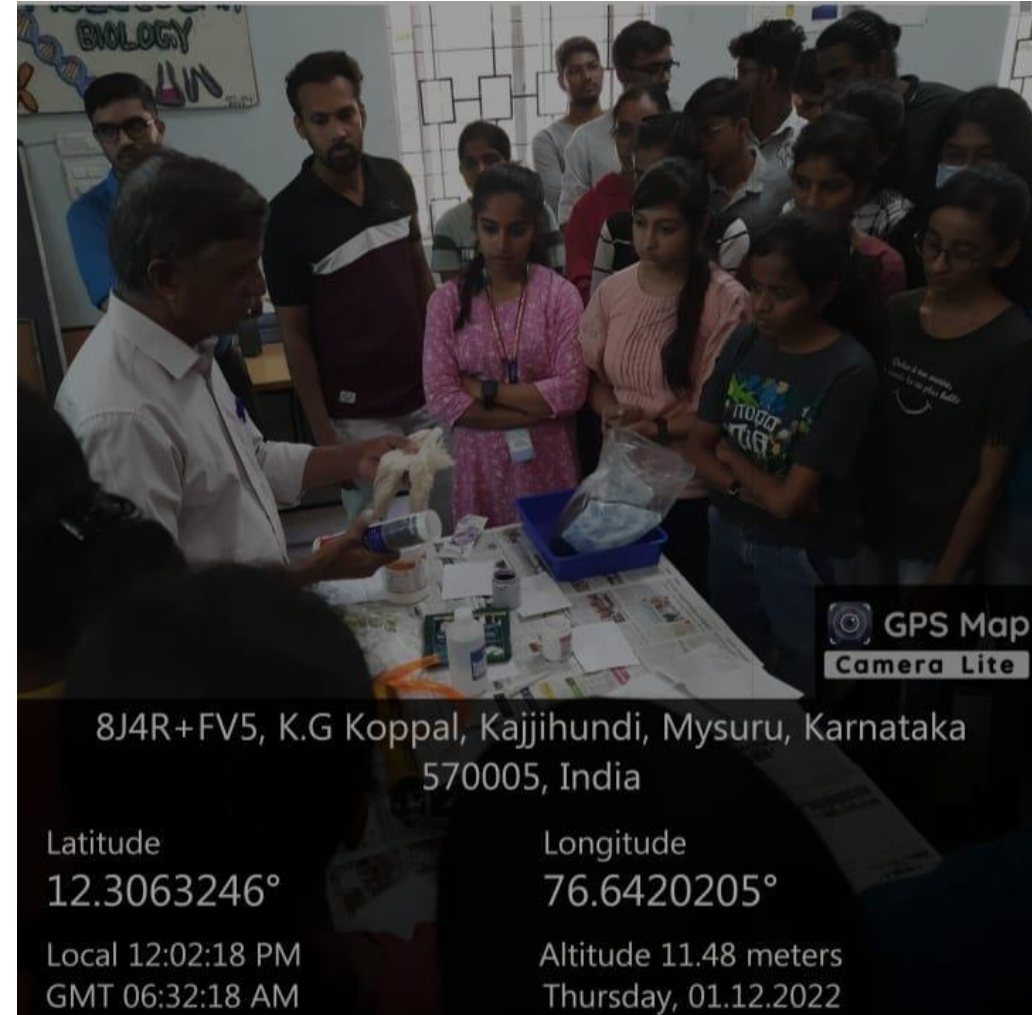
The programme commenced at 10:30am , attended by over 50 participants (1st and 3rd semester students) the gathering was then addressed by my classmate Ishwarya and she introduced **Dr. Shamasundar's** sir achievements and gave a brief knowledge of its discoveries over plastination and also about his life time awards.

Dr.Shamasundar was then called upon to deliver his lecture on the topic "**PLASTINATION**". His talk began with an introduction as to why we need to plastinate body parts. He made us understand by narrating his own story of him in younger age that when he was a student , he used to visit museums , library with his friends during their free hour. Once upon a day inside a museum , he saw organs in a bigger containers and filled with formulin as he went forward to touch , his teacher stopped him immediately . So he started thinking how he could make it better so that the children like him could touch it with their hand and feel its structure , so that the blind people could also have the chance to visit the museums and the search began to his new journey .

He completed BSc in Zoology in Yuvaraja college and stood first rank and got into Mysuru Medical College (MMC) .

At a time when medical expenses has shoot over the roof and consultation with specialists burns a whole in the pocket of a common man Dr N.M.Shama Sunder is treating his patients for just Rs.10

Instead of wasting time by watching television ,
Dr. N.M.Shamasundar decides to serve poor in the evenings at his clinic .



Dr. Shamasundar Sir started the plastination by sheep lungs

Firstly he instructed us to wash wash the lungs flesh thoroughly in the water and rinse it upside down and again to wash it with the soap solution .

When the procedures were done ,he tied the end of the lungs to silicon containing gun though which silicon is poured into the lungs systematically.After several knots between the gun and the lungs he explained us the steps of the procedure and gave us the opportunity to fill the silicon into the lungs .After that , he instructed us to keep the lungs inside the water vessel for a day and to rinse it in acid for about 3 to 4 hours .A day later when we finally saw the results we were amazed, the tracheas of the lungs were so clear and it was a good experience .





Plastination of embryo



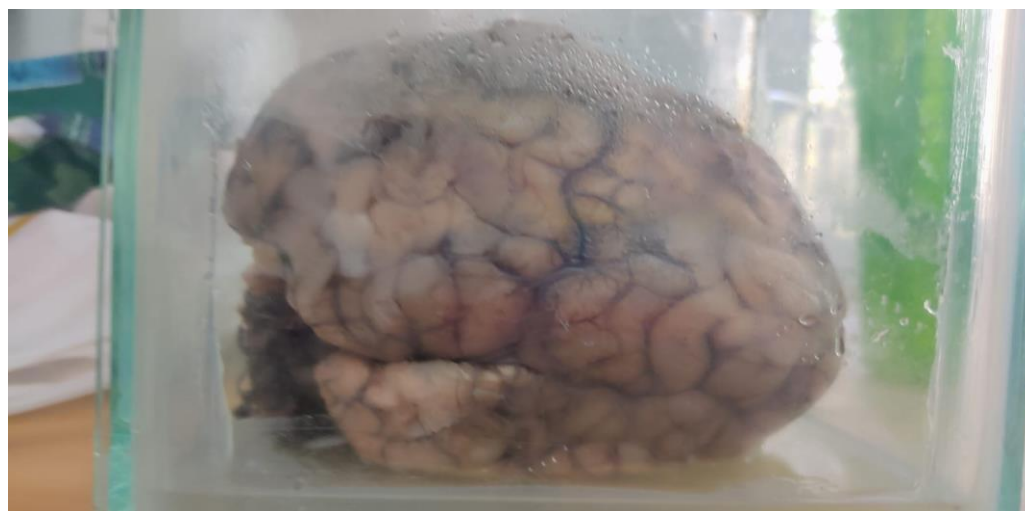
Plastination of heart



Plastination of foetus with placenta



Plastination of stone in kidney



Plastination of human brain

Then he showed us his plastination of stones which was present in one of his patients kidney and also he had the plastination of undeveloped or aborted babies and embryos .

We also learnt how to make plastination on leaves , insects, etc

We took two glass sheets , on one of them we sprinkled water and placed OHP sheet so that the sheet gets stucked on the glass and repeated the same on the other side . We measured the length and breadth of the glass sheet and cut the hard pipe in U- shaped according to the measurement and made it attached it through some clips around the glass sheet .

Then we mixed 20ml of resin (Poly propylene resin), 0.2 to 0.4ml of hardner and catalyst .After sometime it reacts exothermically and becomes harder and it get stored as plastination .

He was so friendly and gave opportunity to everyone to look through and to touch his materials .The lecture was followed by a Q and A session in which the audience actively participated . The programme was then concluded at 1:30 pm with the vote of thanks .