

The Ministry of Education and Science of the Republic of Buryatia «Buryat  
State University»  
Medical Institute  
Department of Foreign Languages science directions

# ORGAN TRANSPLANTATION



# The purpose and objectives of work

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The choice of this theme is justified by the urgency of the problem at the present time.

The purpose of my work to study features of an organ transplantation at the person.

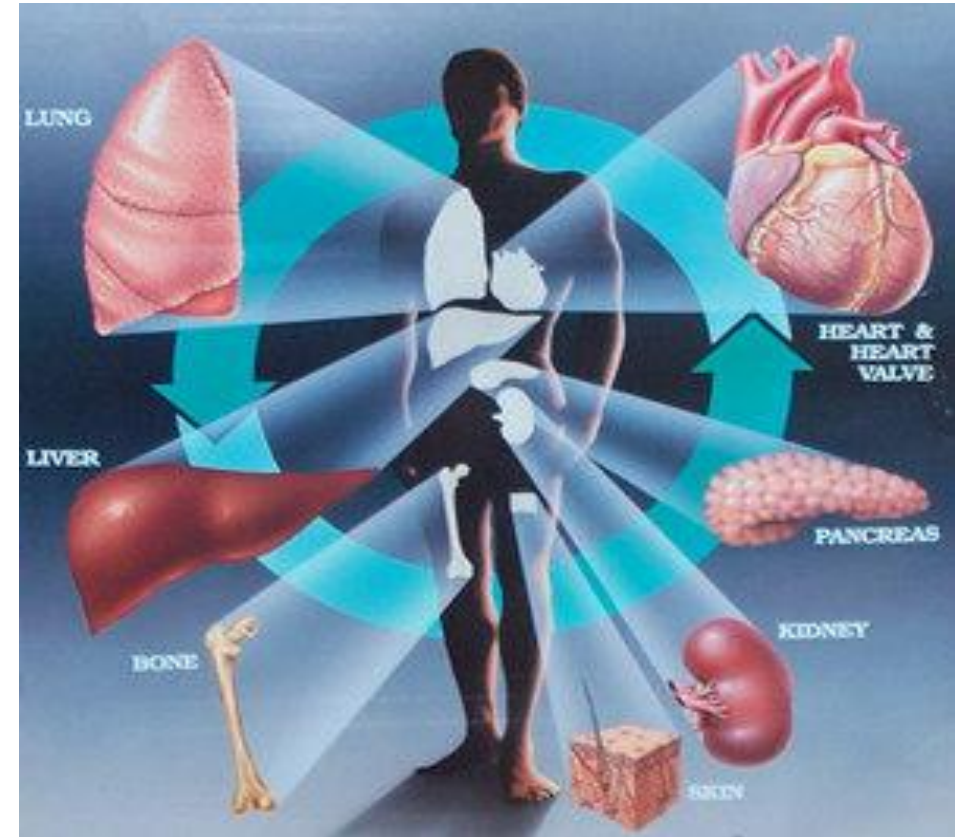
Tasks:

- to tell about what is transplantation;
- to tell about the first steps in this direction.
- to tell about problems at an organ transplantation;
- to tell about problems of organ donation;

# Organ transplantation

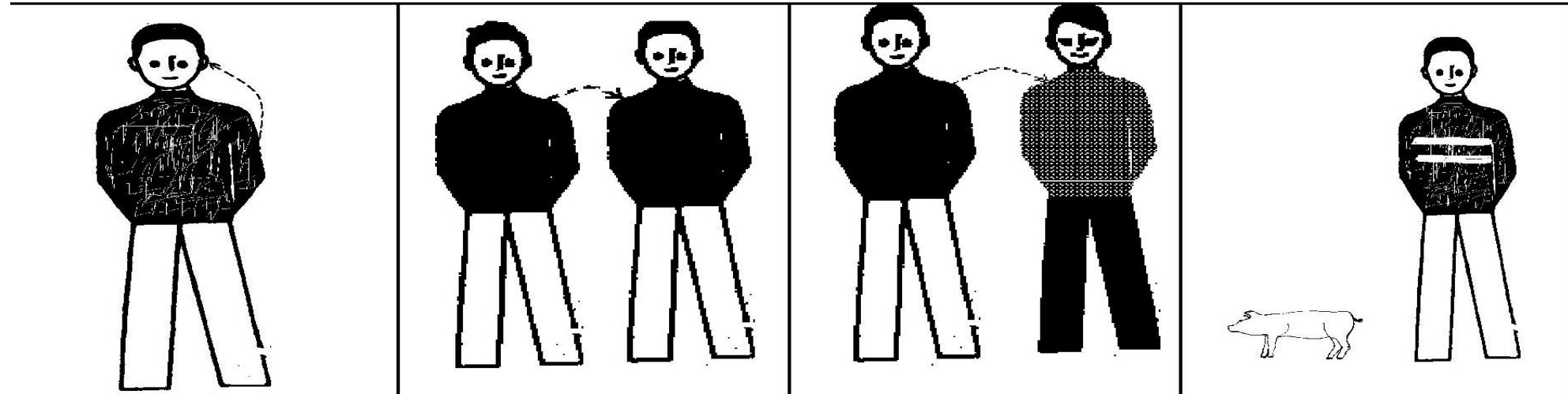
Organ transplantation represents the removal of a viable organ from the donor and transplanting it to the recipient. Thanks to modern medical advances today possible transplantation of many organs, including kidneys, liver, heart and pancreas.

Transplantation consists of two stages: intake of the organ from the donor organism and implanting it in the recipient's body. Transplantation of organs or tissues can be carried out only when other medicines cannot guarantee conservation of life of the recipient or the recovery of his health.

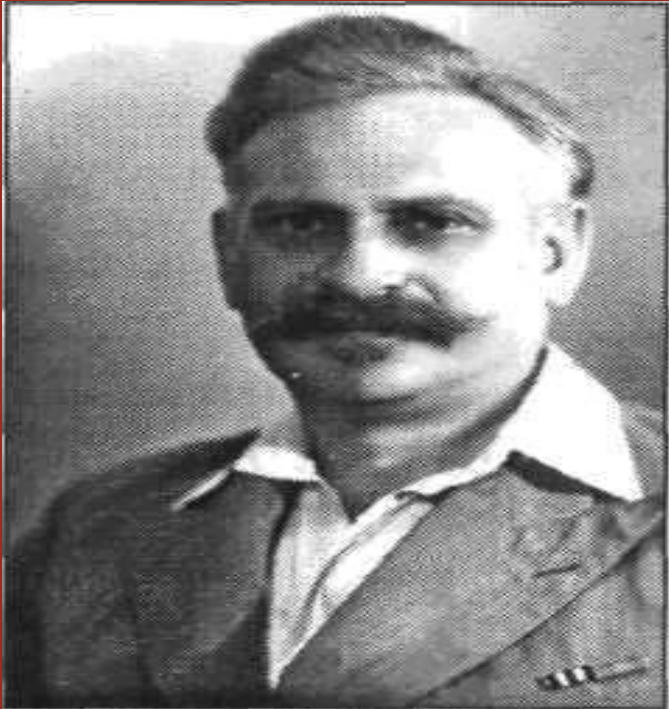


# Organ transplants there are four types:

1. Allotransplantation of donor and recipient belong to the same species.
2. Xenotransplantation – the two subjects belong to different species.
3. Isotransplantation- transplant tissues or organs produced from identical twins or animals.
4. Autotransplantation – is the transplantation of tissues and organs within one organism.



# Steps in transplantation



The first organ transplant from human to human in 1933 in Kherson performed Voronoy.



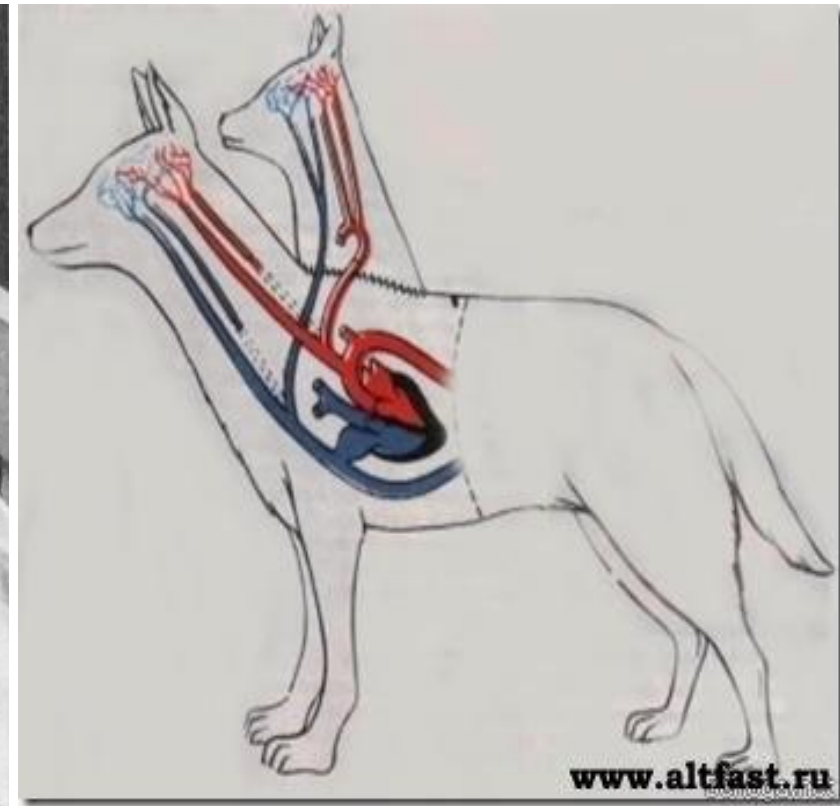
The year 1933. Voronoy with the staff of the surgical Department of Kherson Soviet city hospital.



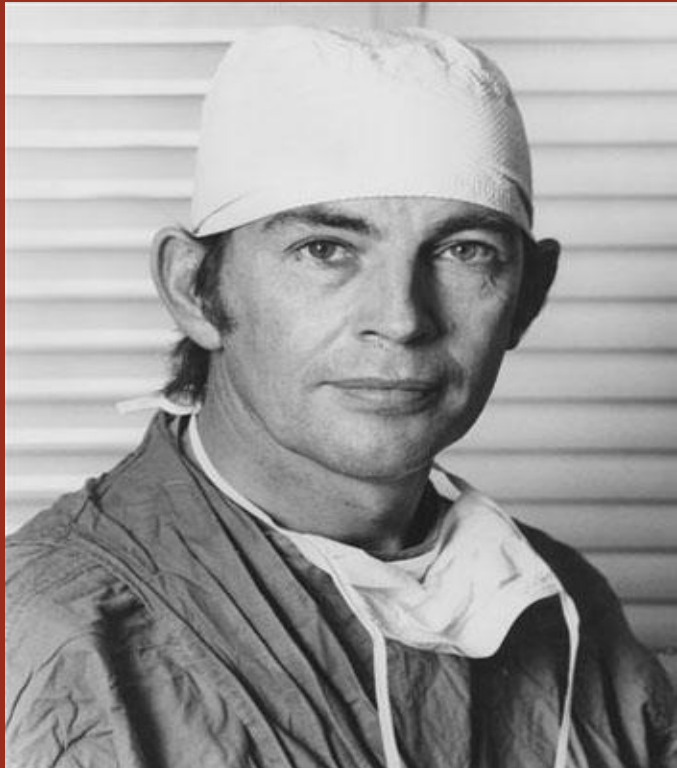
# The first time in the world transplanted a donor heart dog



One of the founder of experimental transplantation of vital organs, the Russian scientist Vladimir Petrovich Demikhov, in 1951 for the first time in the world transplanted a donor heart dog.



# The first heart transplant

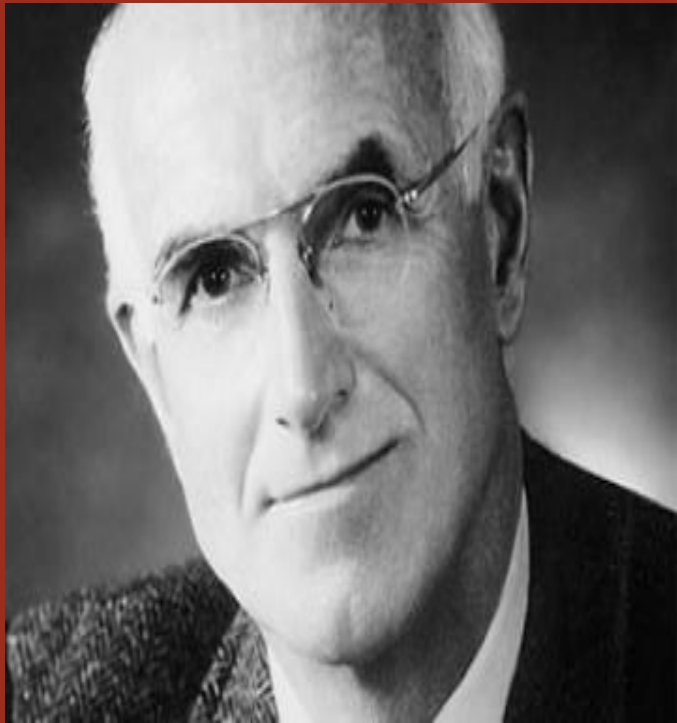


The first heart transplant was performed on 3 December 1967 surgeon Christiaan Barnard.





# The first successful kidney transplantation



The first successful kidney transplantation from human to human was carried out in December 1954 between two identical twins by Dr. Joseph Murray.





# The first liver transplant



The first liver transplant was performed in 1956  
Thomas Starzl.



Lung transplantation was first performed in 1963 by Dr. James Hardy.

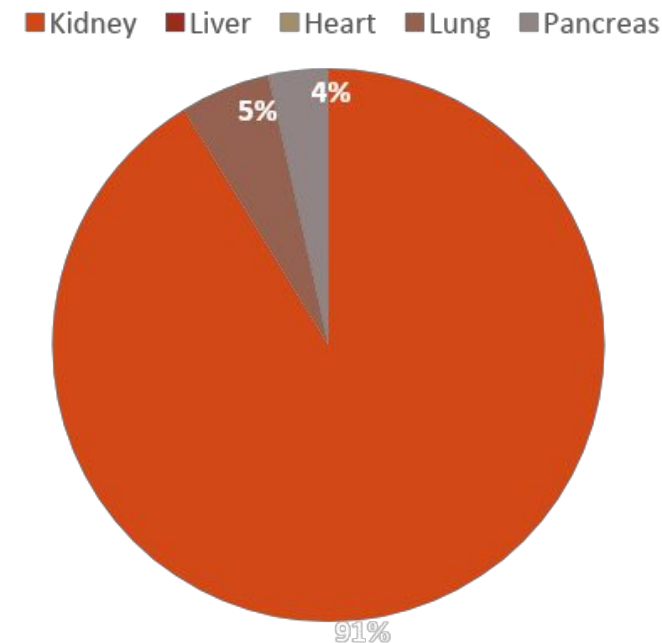
## The first lung transplantation



# Transplantation in Russia and in the world

Annually in the world carried out 100 thousand organ transplants and more than 200 thousand - of human tissues and cells. Of these, up to 26 thousand accounted for kidney transplantation, 8-10 thousand - liver, 2.7-4.5 thousand - the heart, 1,5 thousand - lung, 1000 - pancreas.

The leader among the nations of the world in the number of transplants carried out by the USA: American doctors perform annually 10 thousand kidney transplants, 4000 - liver, 2 thousand - the heart. Russia produces 4-5 heart transplants annually, 5-10 liver transplants, kidney transplants 500-800.



# Problems of transplantation

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Undoubtedly, the transplantation was one of the most outstanding and promising scientific achievements of the 20th century. However, having appeared, she has put essentially new moral and ethical, legal and social and economic problems before society

The problem fence of bodies and tissues from a donor considered depending on whether the donor is alive or dead person.

The problem of ascertaining the death of a man. The vast majority of countries the main criterion for the death of a man recognized as brain death.





# Problems of transplantation

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Organ donation shortage problem is solved in different ways: there is a propaganda organ donation after death with intravital registration consent to it, to create artificial organs, developed methods for obtaining donor organs from animals, by culturing the somatic stem cells, followed by obtaining certain types of tissue, the creation of artificial organs at bioelectronics and nanotechnology-based advances.

The problem of shortage of donor organs is solved in different ways: there is the propaganda organ donation after death with lifetime registration consent to it, create artificial organs, methods of obtaining donor organs from an animal, culturing the somatic stem cells followed by production of certain types of fabrics, create artificial organs on the basis of the achievements of bioelectronics and nanotechnology.

# Conclusion

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In this work the organ transplantation has been described. It is a problem, actual and necessary for mankind, occupies minds of many outstanding scientists and to his final decision there will pass a lot of time. Nevertheless, some part of a way is already overcome, there are already successful attempts of organ transplantation, but not so much as I would like and maybe in the future they will become more widespread.



Thank you for attention!

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