

Генная инженерия ЖИВОТНЫХ

Практикум

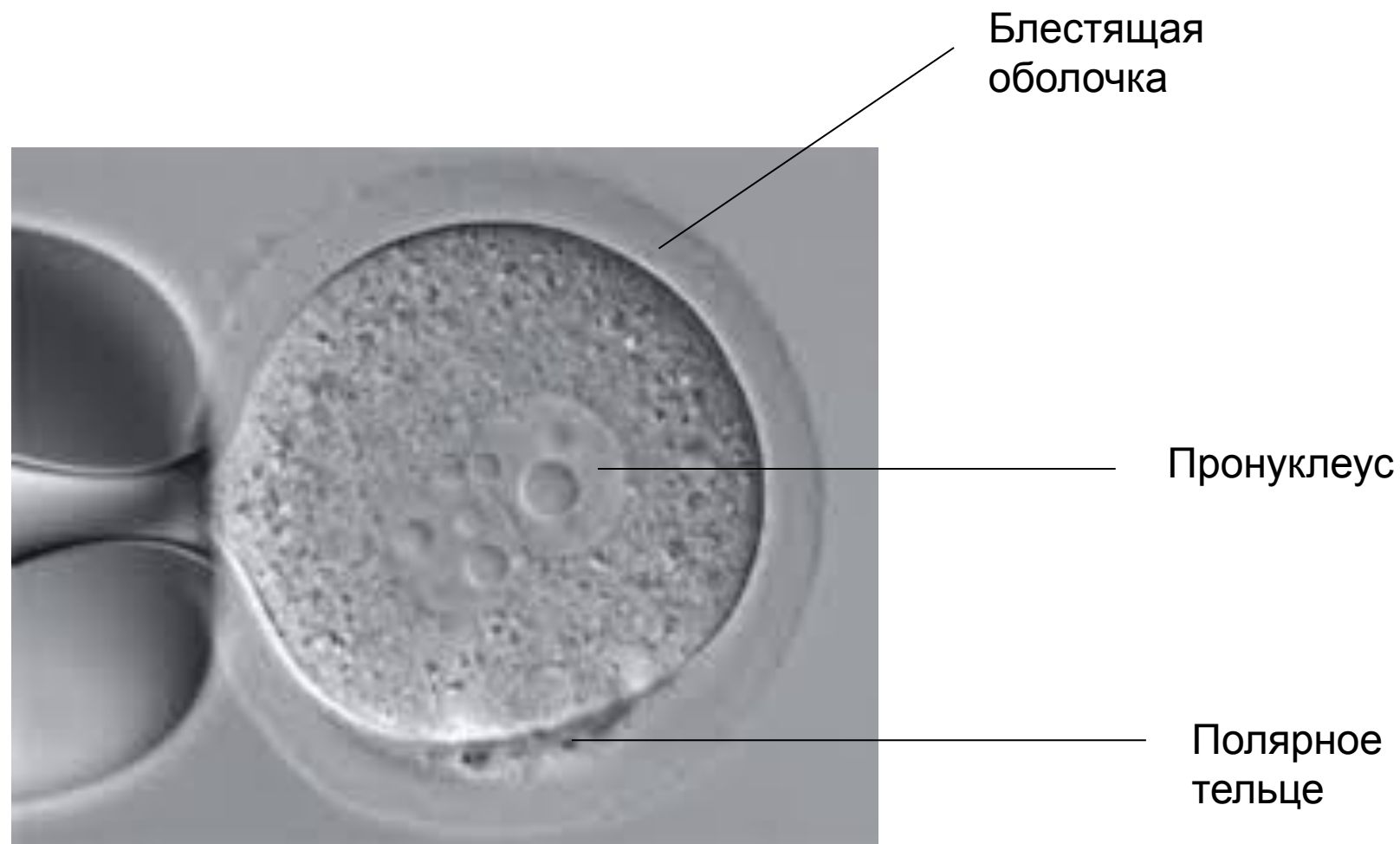
ФББ МГУ – ЦКП ИБГ РАН

2016

Микроинъекции

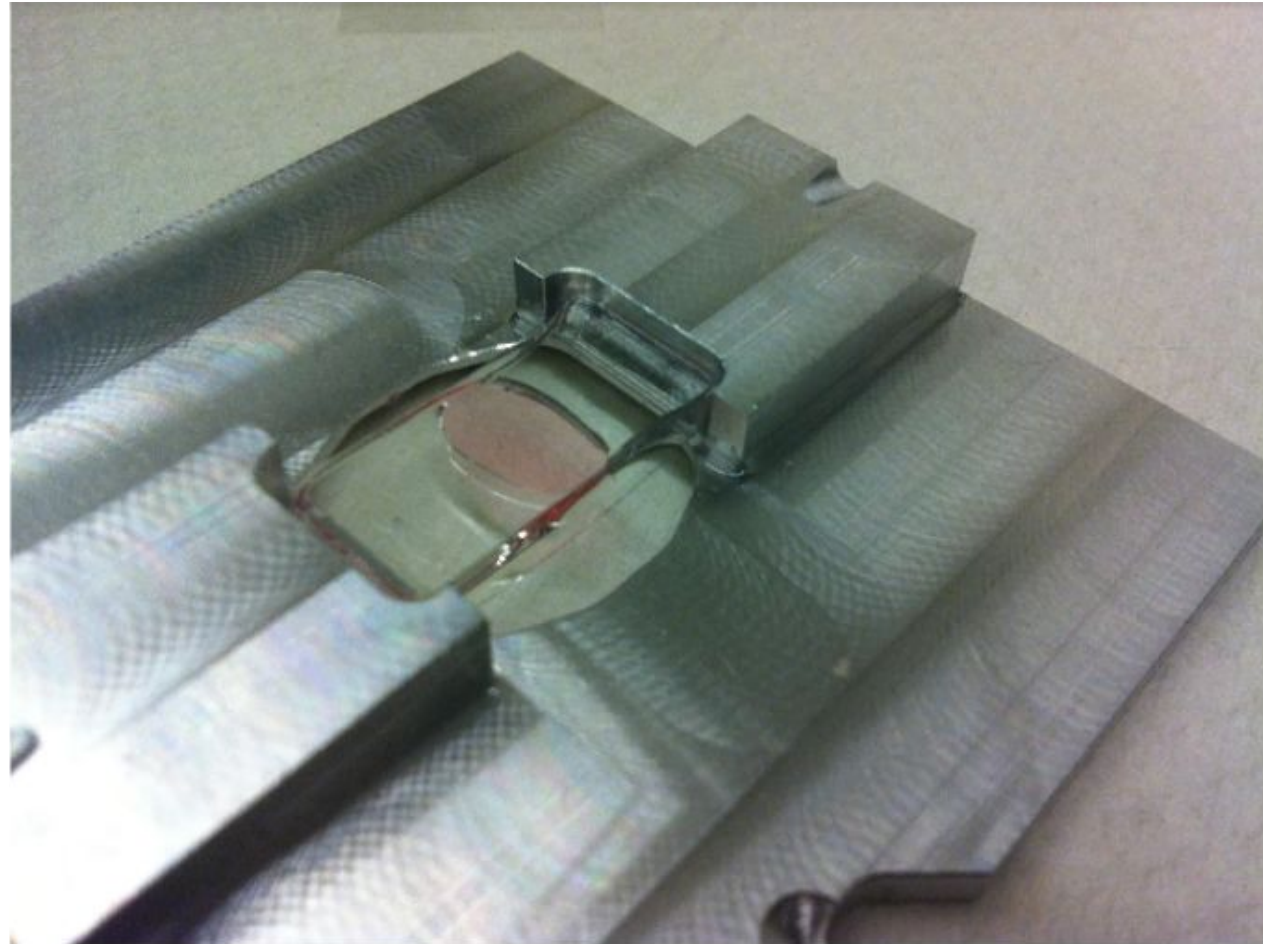


ЗИГОТЫ



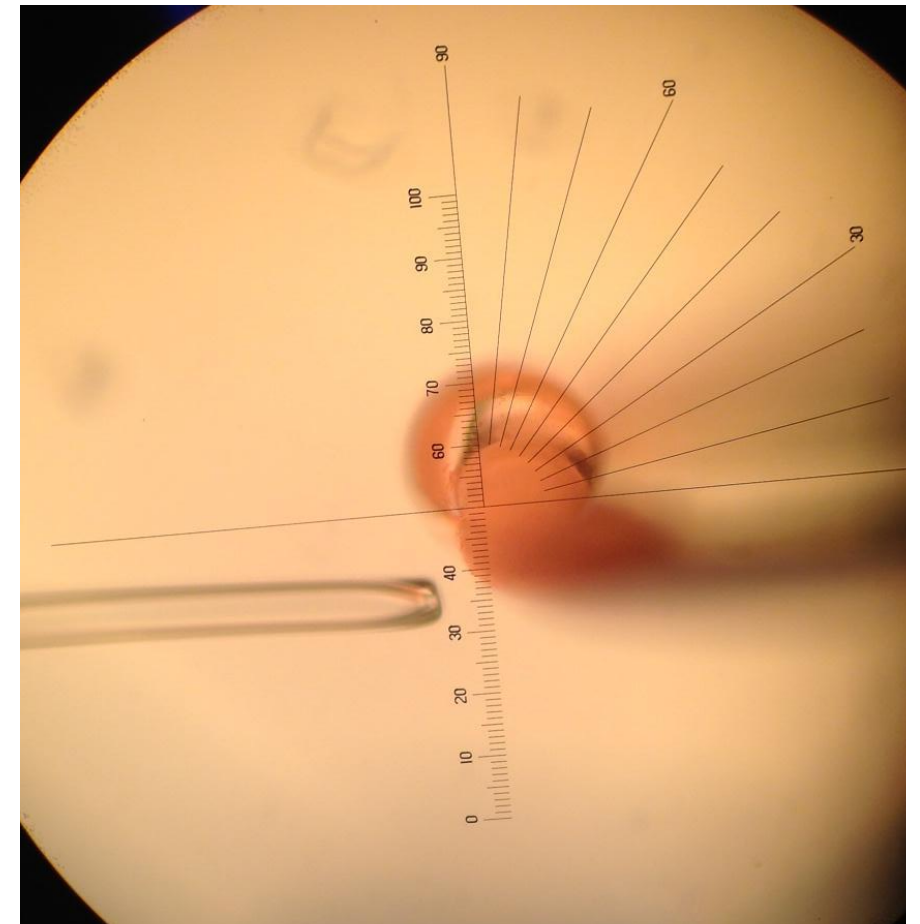
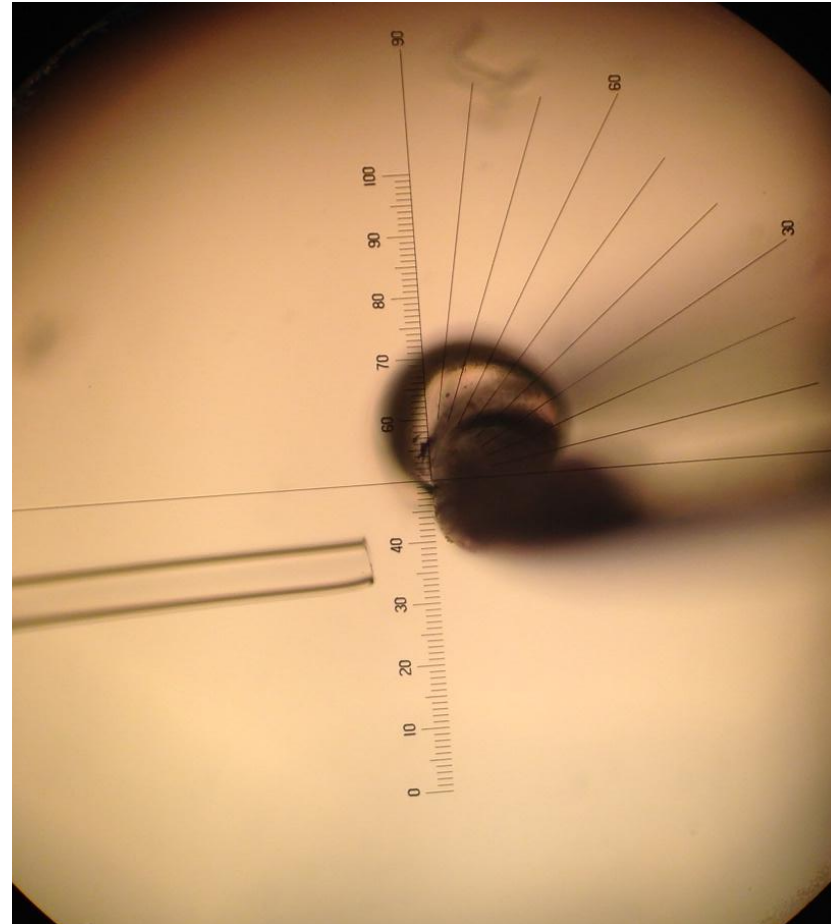
Камера для микроинъекций

- 2 половины покровного стекла
- капля буфера M2
- парафиновое масло



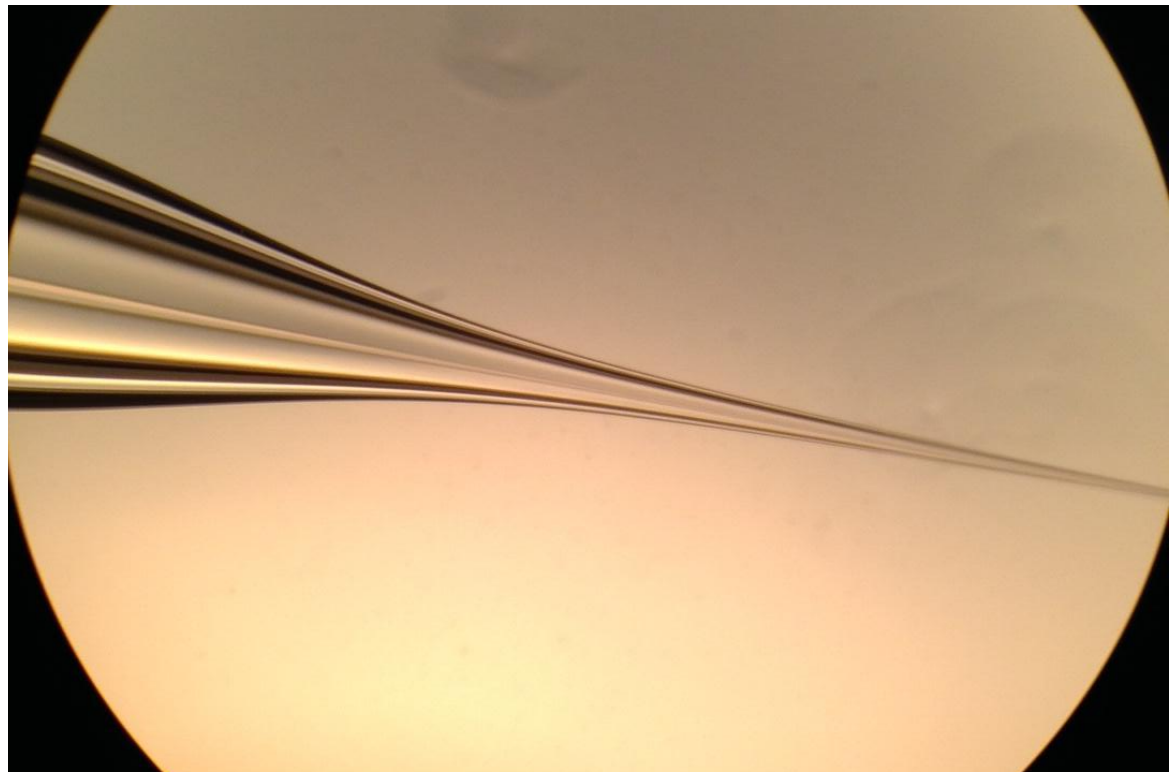
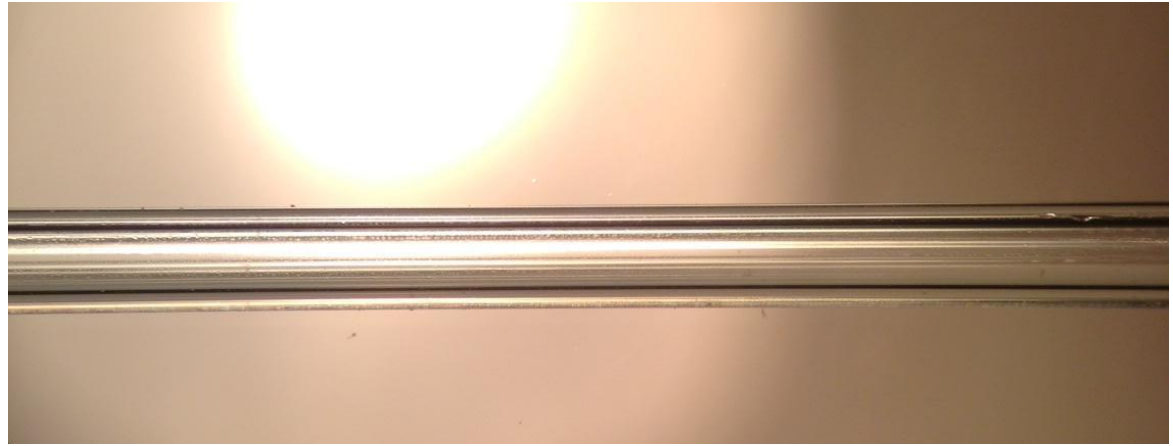
Присоска

- Внешний диаметр - 80 мкм
- Обрезать на кузнице
- Оплавить на кузнице
- Внутренний диаметр – 10 мкм

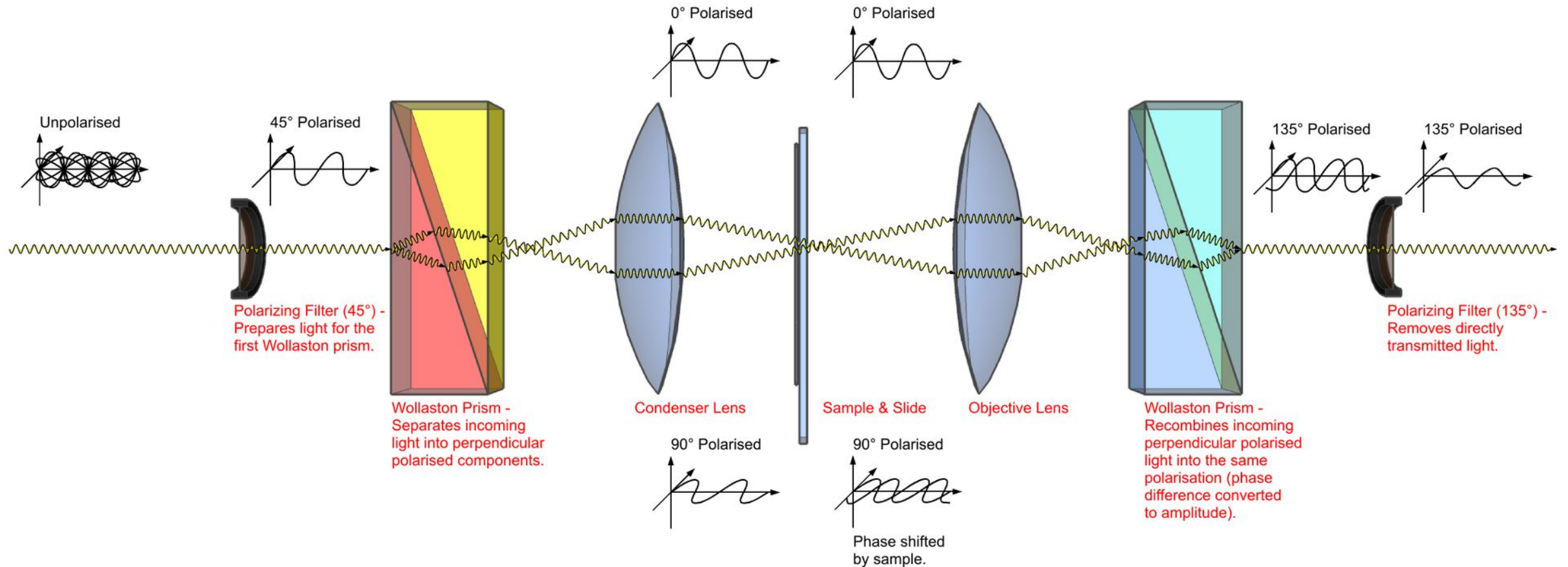


Игла

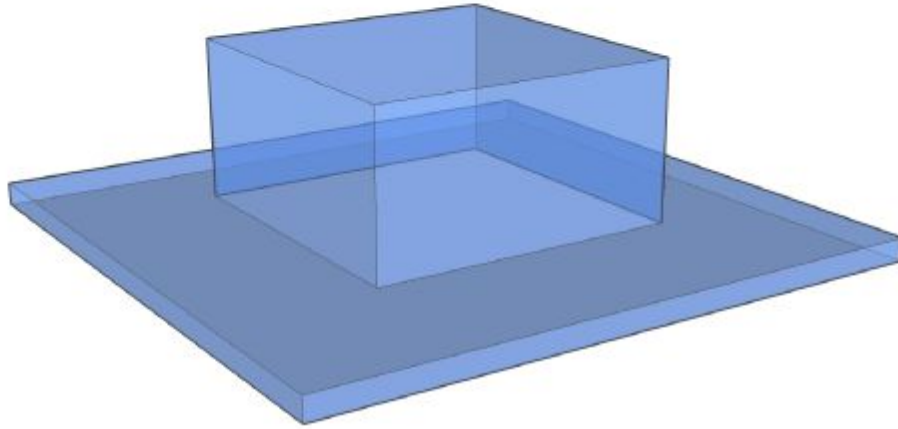
- Капилляр с филаментом
- Наполняется с тупого конца



DIC – дифференциально-интерференционный контраст



Differential Interference Contrast Light Microscopy Example



This transparent sample is illuminated by two slightly offset light sources, one at 0° polarisation and the other at 90° polarisation.

0° Polarisation

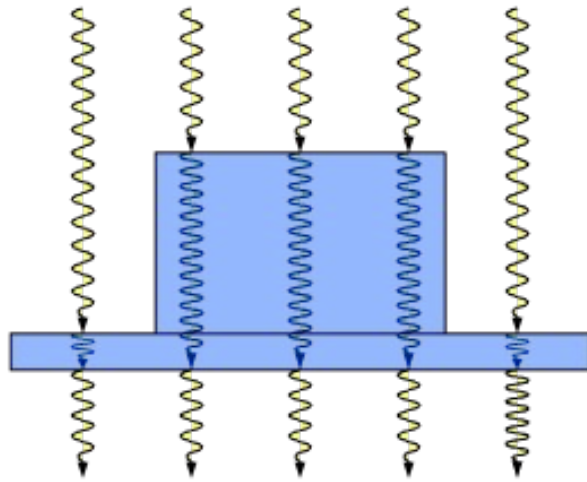
90° Polarisation



100% Absorbtion

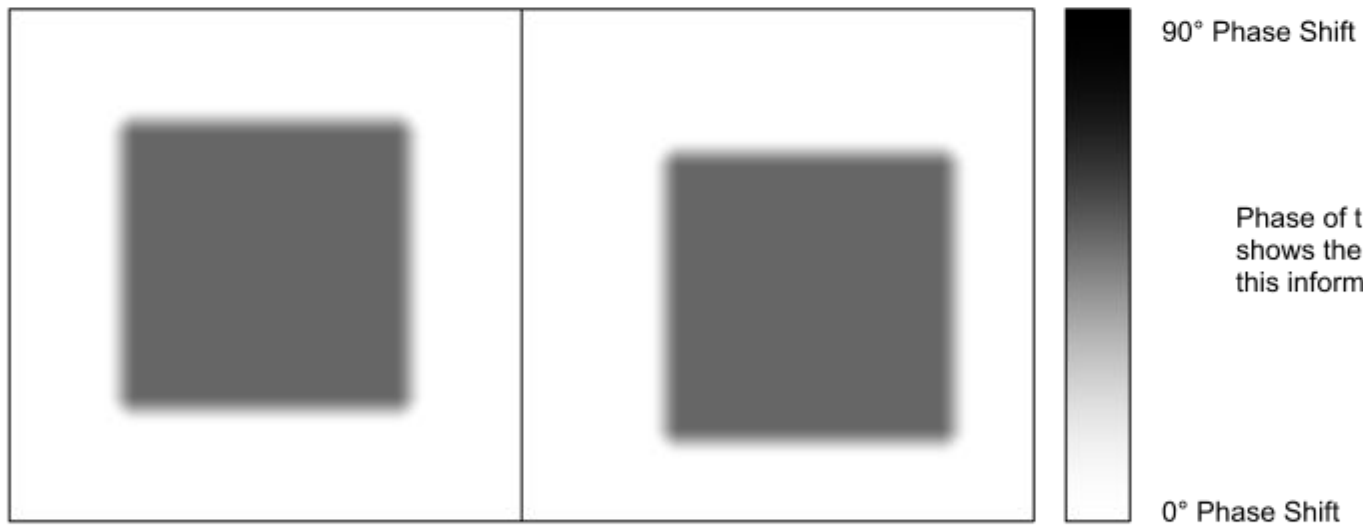
These are the two visible images due to each polarisation. These are not usefull as the transparent sample is not well visualised.

0% Absorbtion



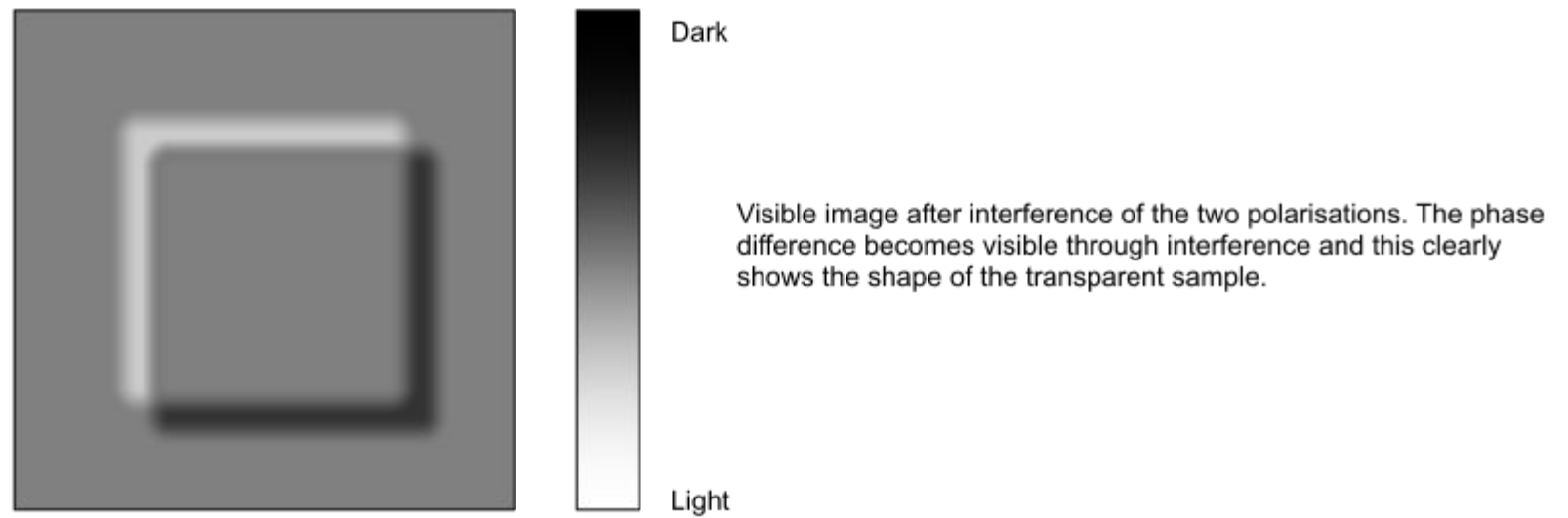
Passage of light through the optically dense sample causes shortening of the wavelength, so a change in phase (phase change greatly exaggerated).



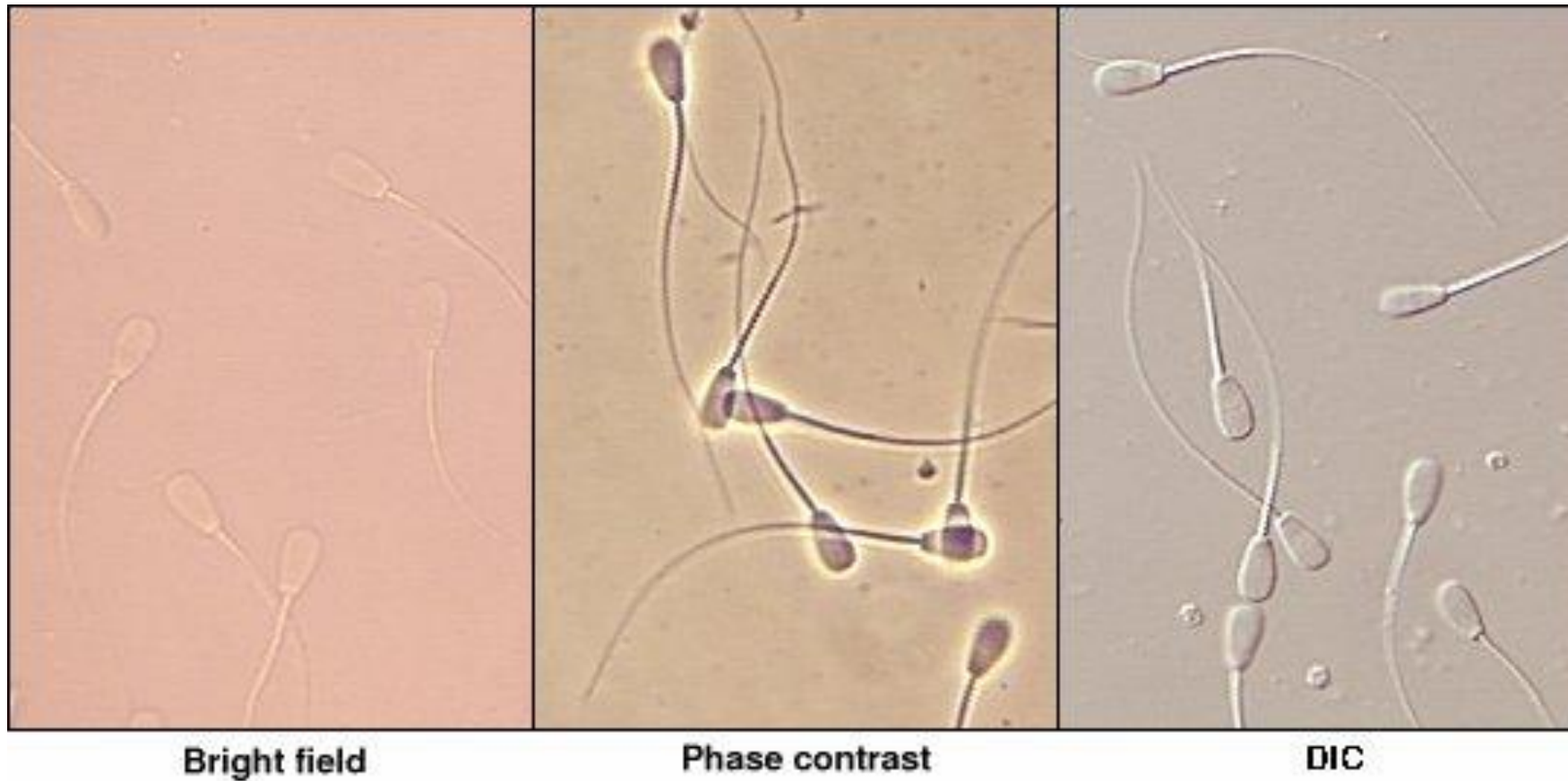


Polarisations rotated to allow interference and images overlaid.

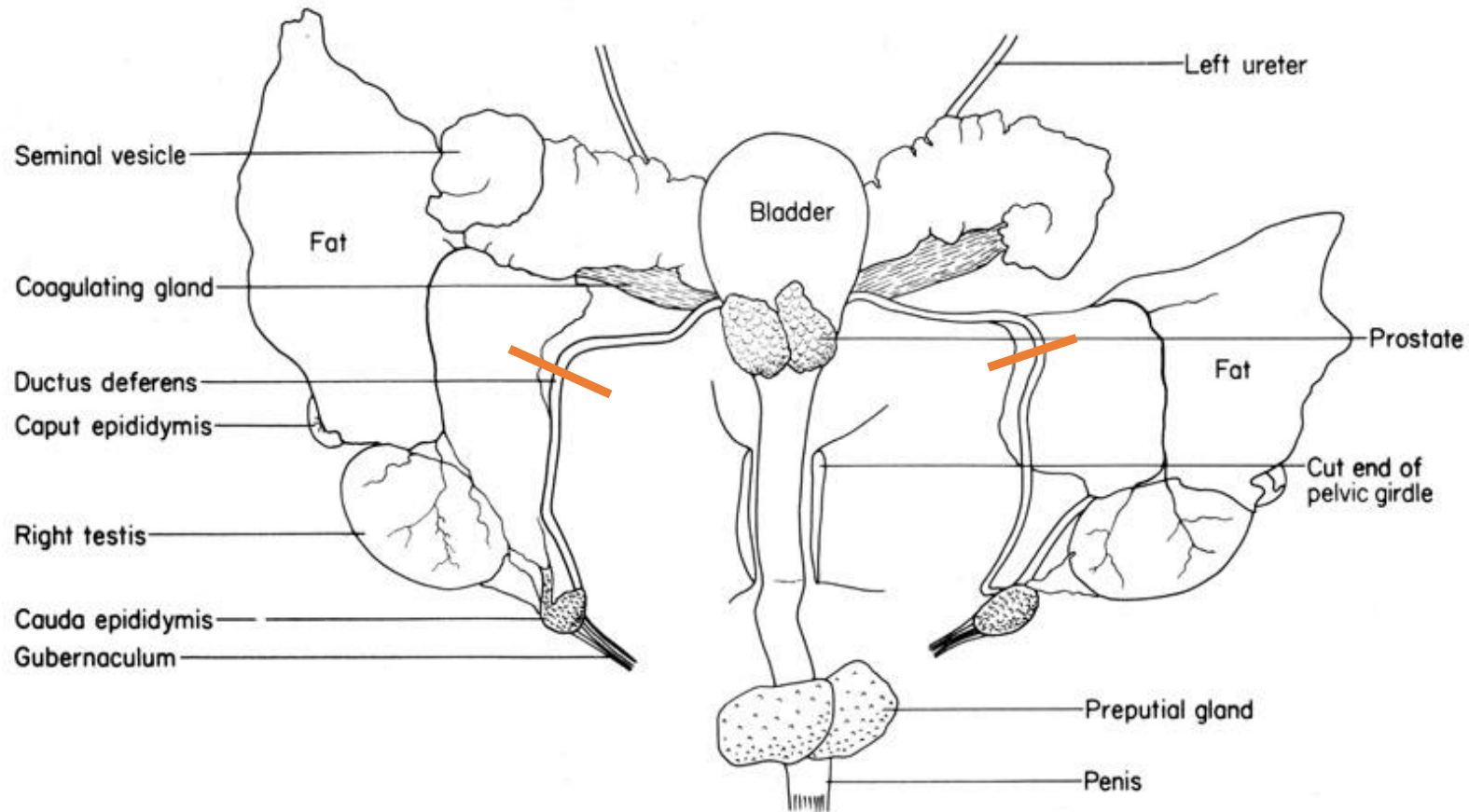
An arrow points from the two images above to the interference image below.



Сперматозоиды при разных вариантах контрастирования



Вазэктомия



Вазэктомия

