## Протокол № 3

##  «\_\_\_\_\_» \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 20\_\_ года

## *ТЕМА:* ФИЗИОЛОГИЯ ВОЗБУДИМЫХ ТКАНЕЙ. ОБЩИЕ СВОЙСТВА ВОЗБУДИМЫХ ТКАНЕЙ.

## Домашнее задание

 ***1. Дать определение основным понятиям темы:***

**Возбудимость** –

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**Возбуждение** –

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**Порог возбуждения** –

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**Критический уровень деполяризации** ––**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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**Пороговый потенциал -**

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**Реобаза** –

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**Полезное время - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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**Лабильность-**  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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***2. Графически изобразить изменения возбудимости в разные фазы потенциала действия и локального ответа***

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| **График потенциала действия (ПД)** | **График локального ответа (ЛО)** |
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| **Возбудимость при ПД** | **Возбудимость при ЛО** |
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Условные обозначения фаз ПД и возбудимости: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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 ***Работа 1. Проведение виртуального эксперимента по определению хронаксии с использованием математической модели***

**Цель работы:** Провести виртуальный эксперимент по определению хронаксии с использованием математической модели, отражающей закон силы-длитель-ности.

**Ход работы:** Работа проводится виртуально на математической модели возбудимой ткани и осуществляется в 3 этапа:

**Этап 1.** Определить реобазу. Для этого найти минимальную силу раздражителя, которая вызывает возбуждение виртуальной возбудимой ткани при заведомо большой длительности воздействия (150-200 мс).

**Этап 2.**  Определить полезное время. Для этого следует использовать стимул силой в 1 реобазу и найти минимальное время, в течение которого этот раздражитель вызывает возбуждение.

**Этап 3.** Определить хронаксию. Для этого следует использовать стимул силой в 2 реобазы и найти минимальное время, в течение которого этот раздражитель вызывает возбуждение.

Полученные данные размещаем на графике, иллюстрирующем закон силы - длительности:

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**Вывод:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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Подпись преподавателя\_\_\_\_\_\_\_\_\_\_\_\_\_ «\_\_\_» \_\_\_\_\_\_\_ 20\_\_ года