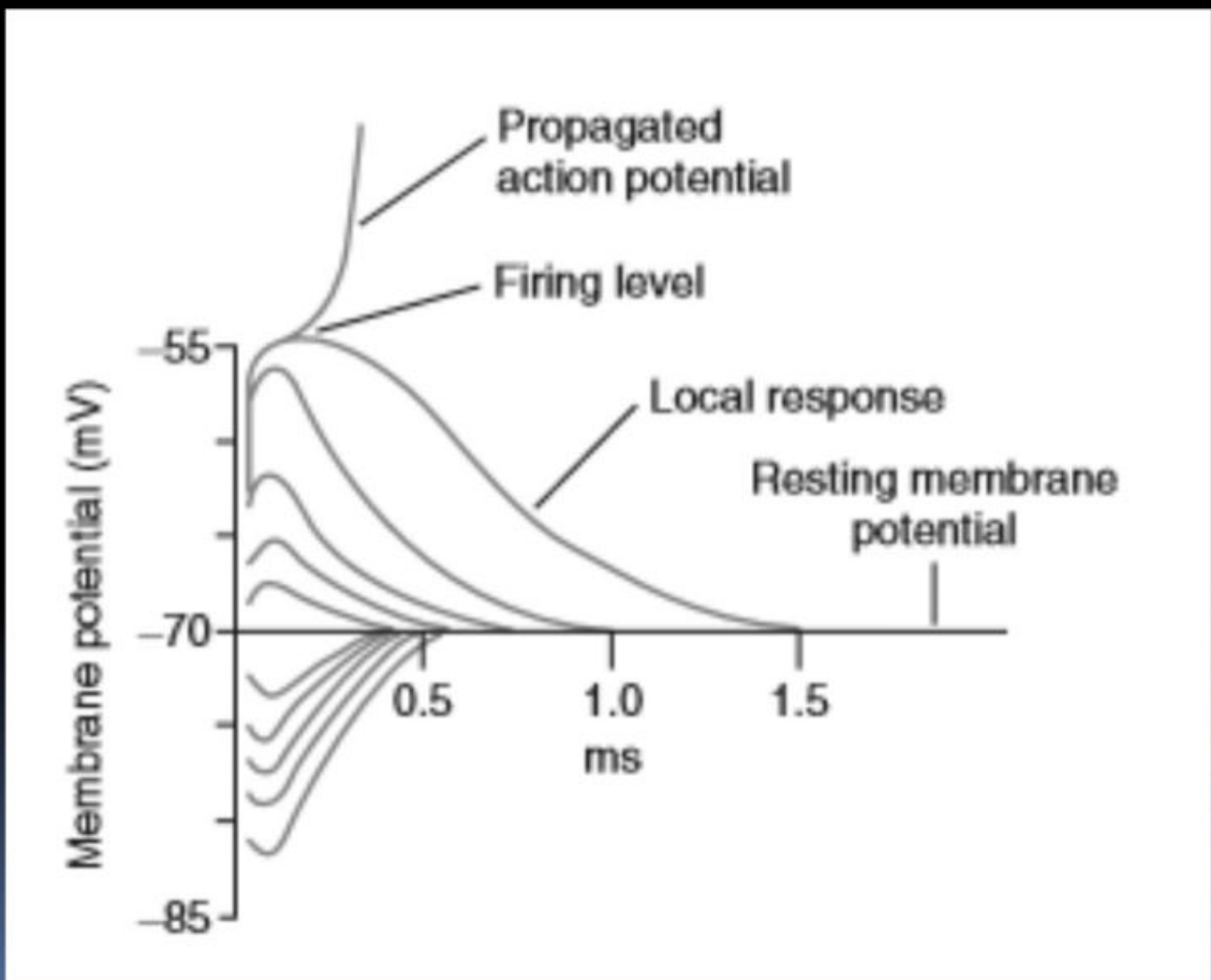


POTENTIALS ACROSS MEMBRANES

Contents

- . Electrotonic potentials
- . Properties of graded potentials
- . Types of stimuli
- . Strength – Duration
- . Action potential
- . Compound action potential

Electrotonic or Graded potential



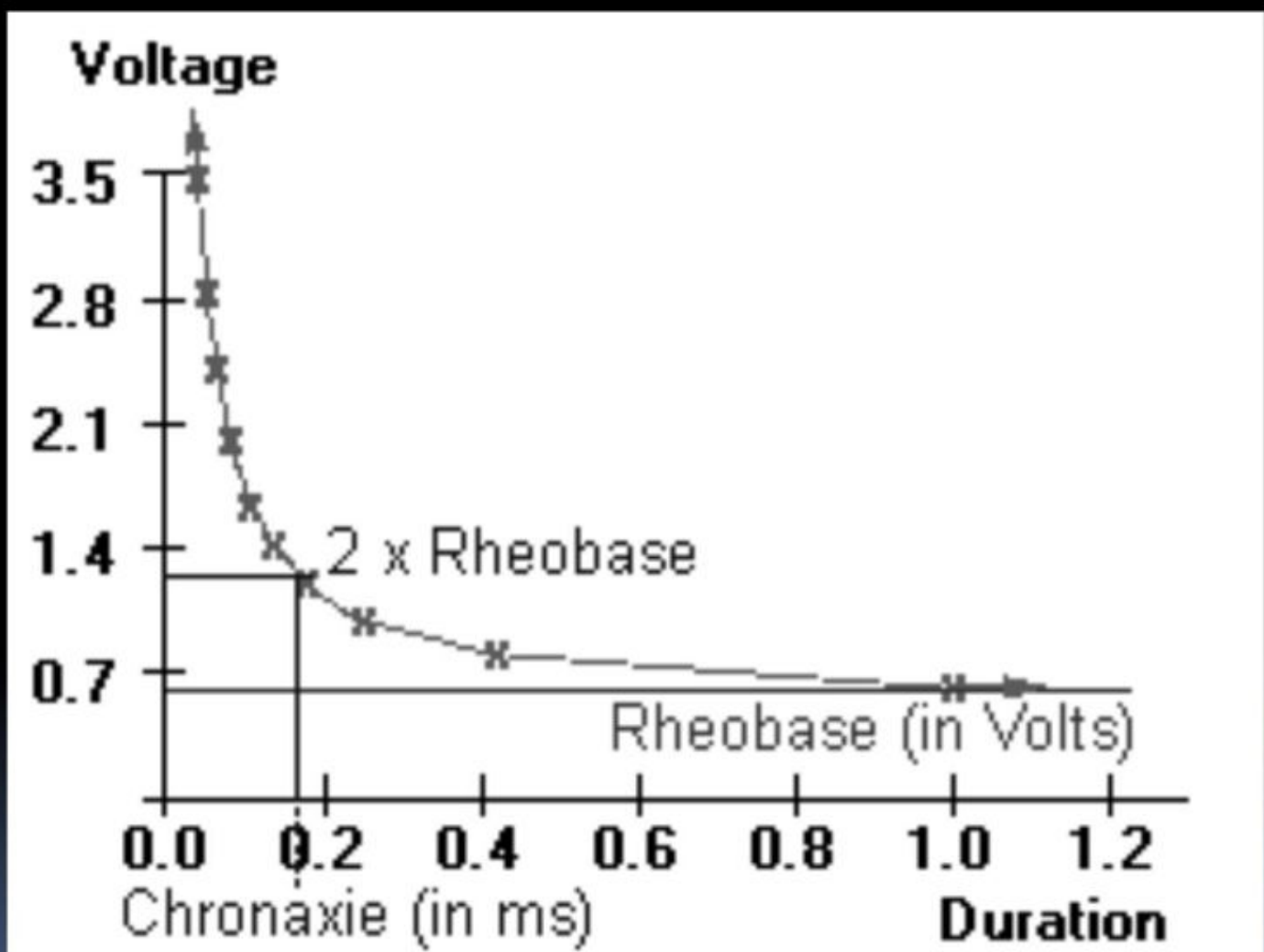
Properties of Graded Potential

- . Graded in nature
- . Decremental conduction
- . Depolarizing or Hyperpolarizing nature
- . Summation

Types of Stimuli

- . Threshold stimuli
- . Subthreshold stimuli
- . Suprathreshold stimuli

Strength –Duration curve

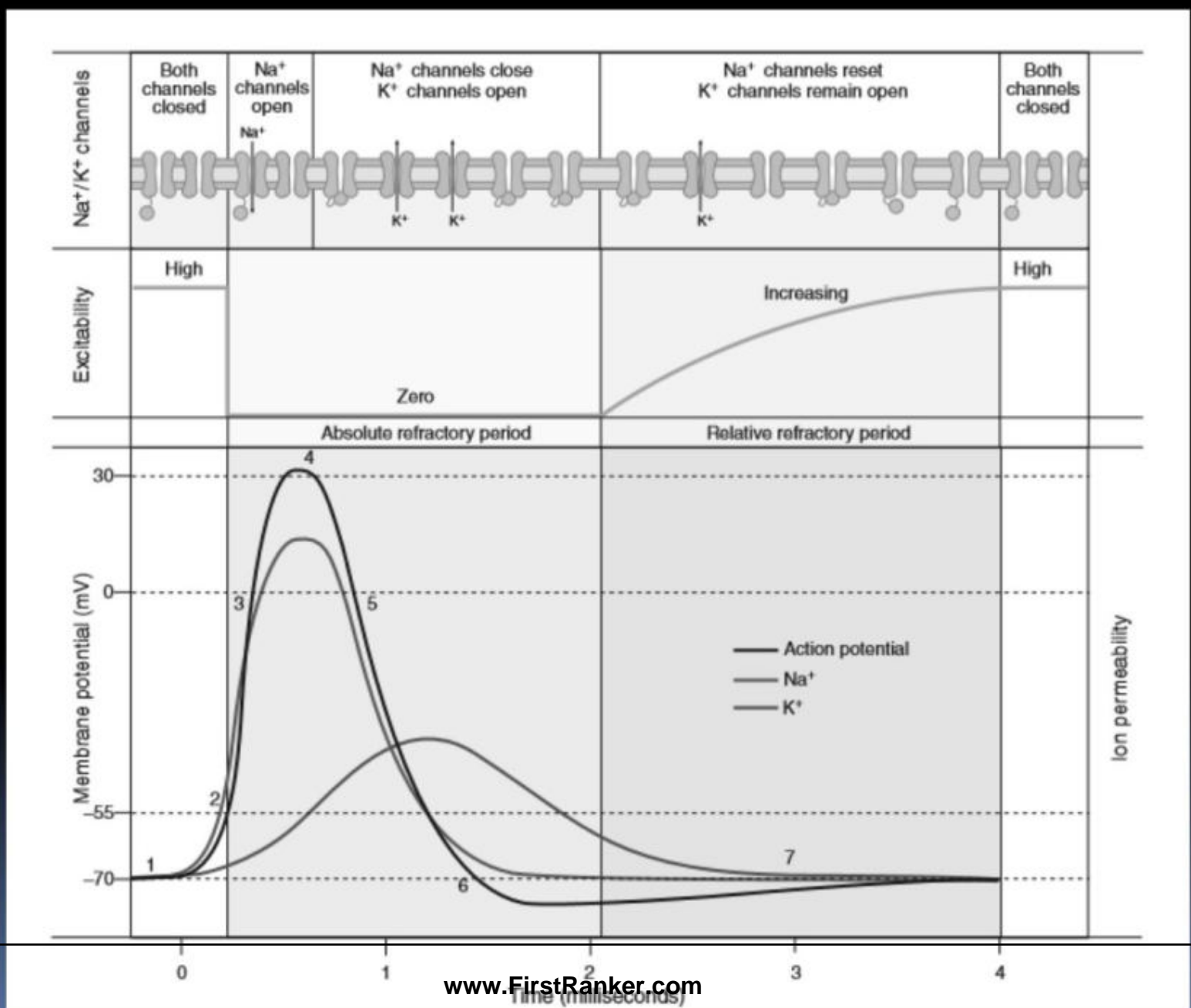


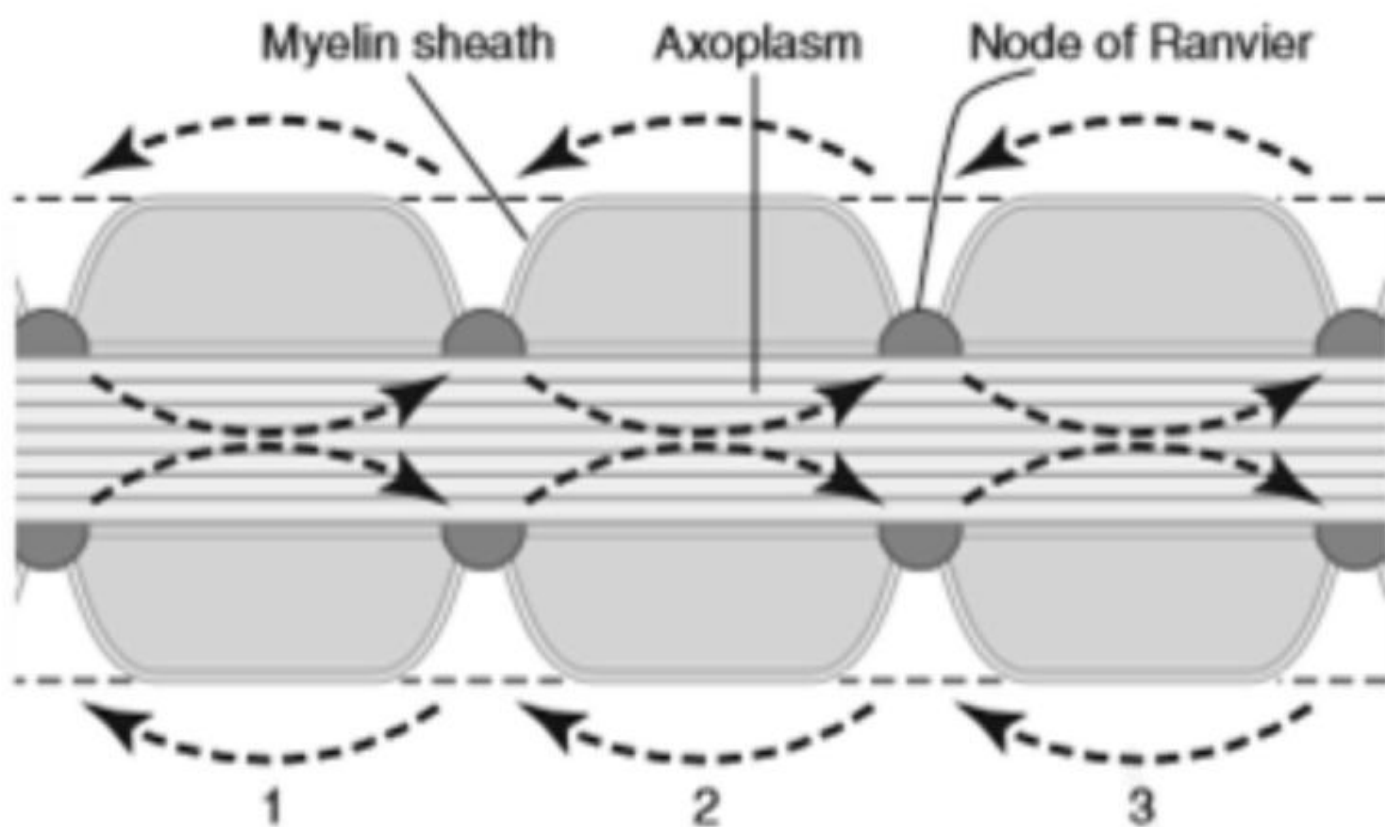
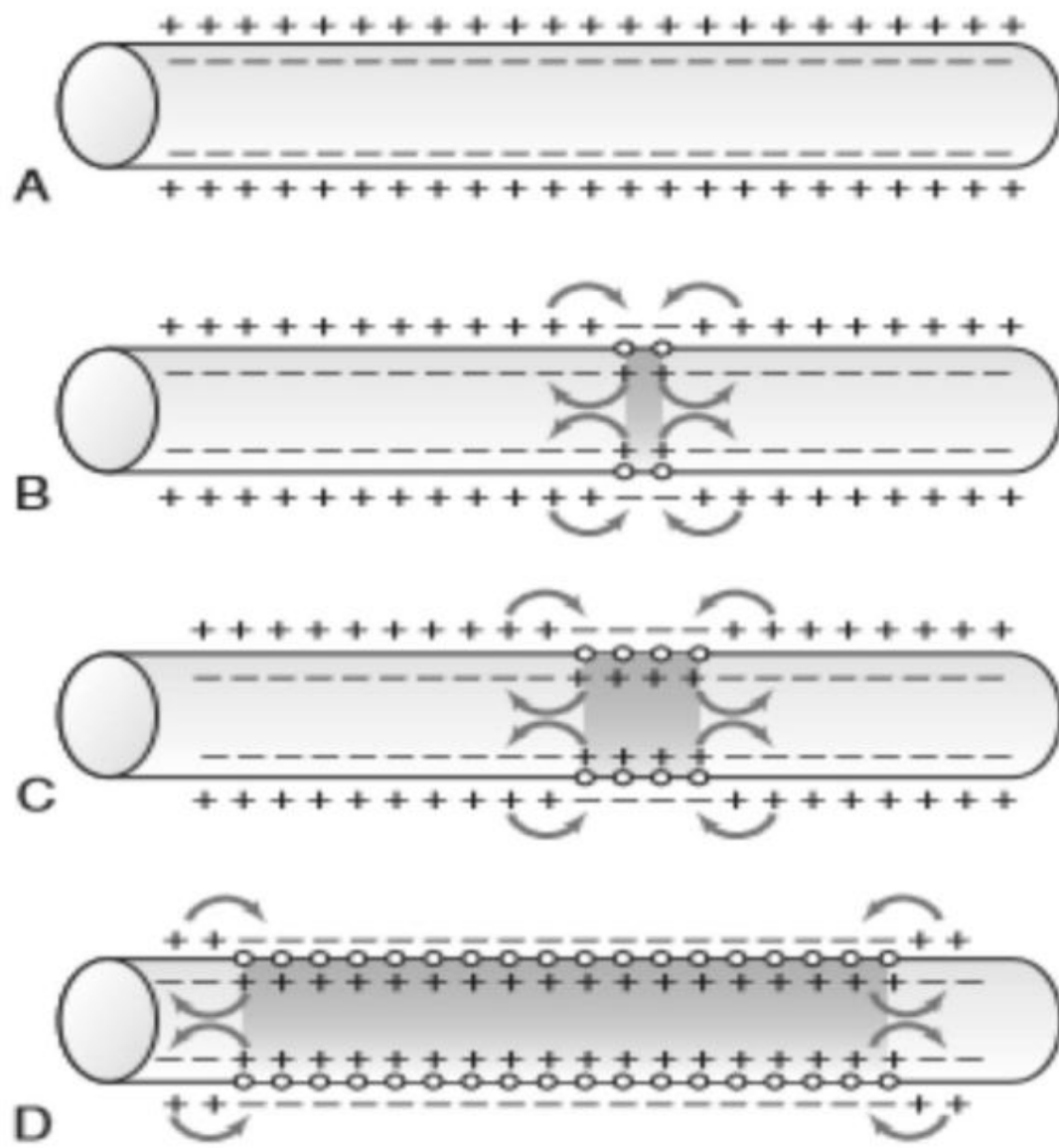


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Graded Potential

1. Amplitude is proportionate to the strength of stimulus
2. Decremental: amplitude decreases with time and distance
3. Can be summated
4. Depolarizing or hyperpolarizing
5. No threshold or refractory period
6. Due to ligand gated or leaky channels opening

Action Potential

1. Amplitude remains same
2. Conducted in All or none manner
3. Cannot be summated
4. Large depolarizing potential
5. Has threshold and refractory period
6. Due to opening of voltage gated channels

Compound Action Potential

