

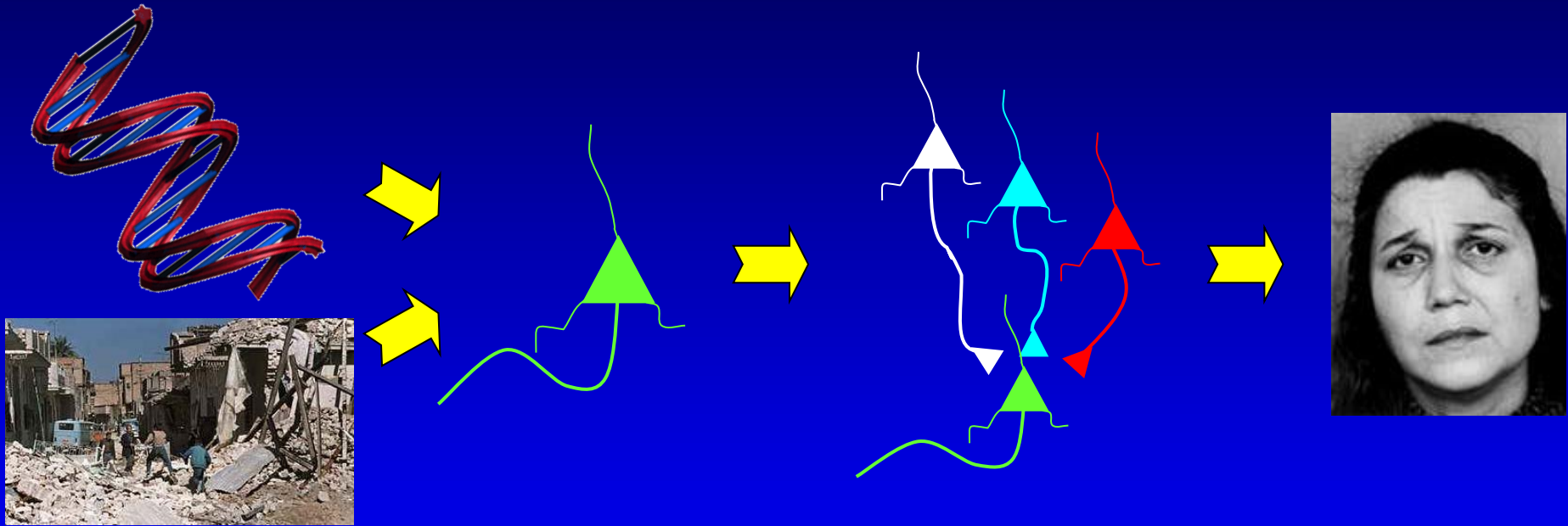
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**ASSISTANT ATTENDING**  
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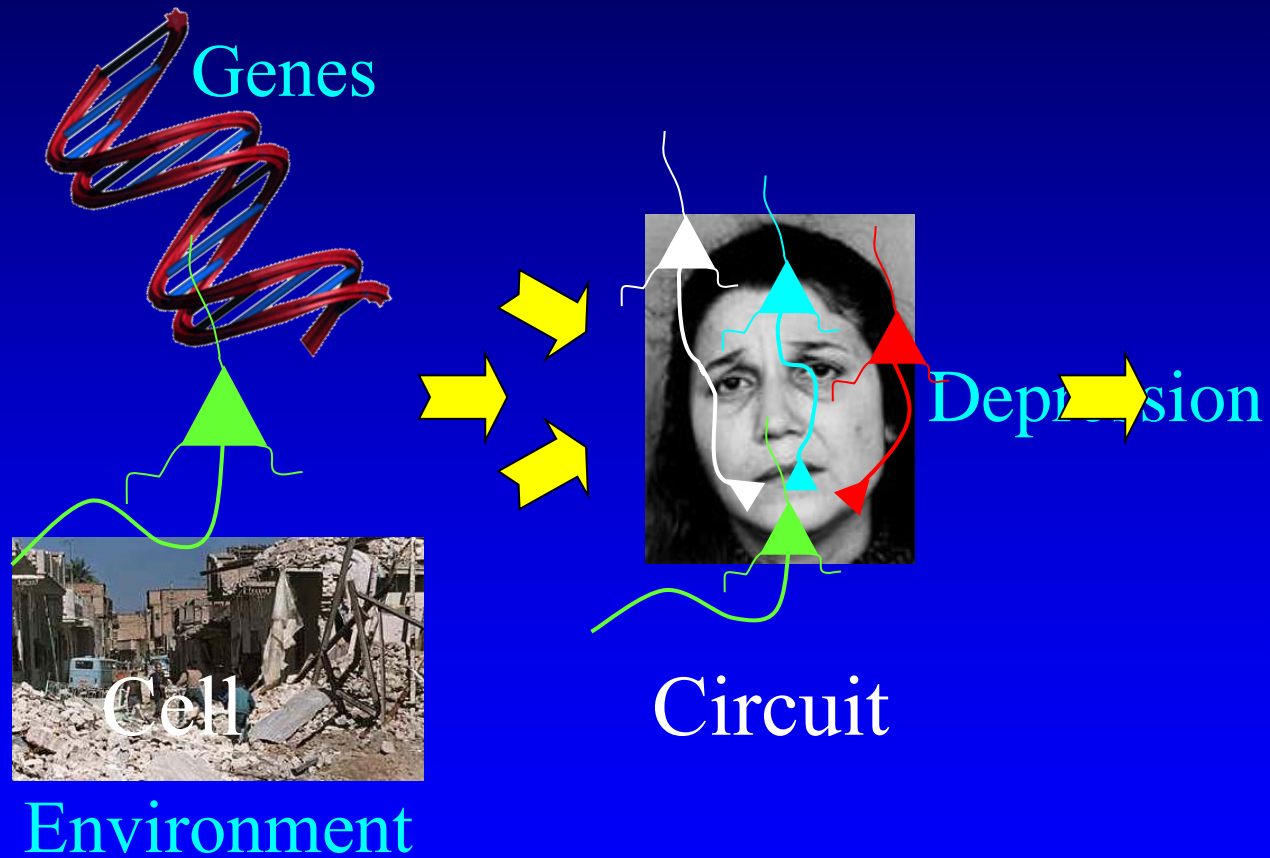
# A Novel Approach to the Neurobiology of Depression



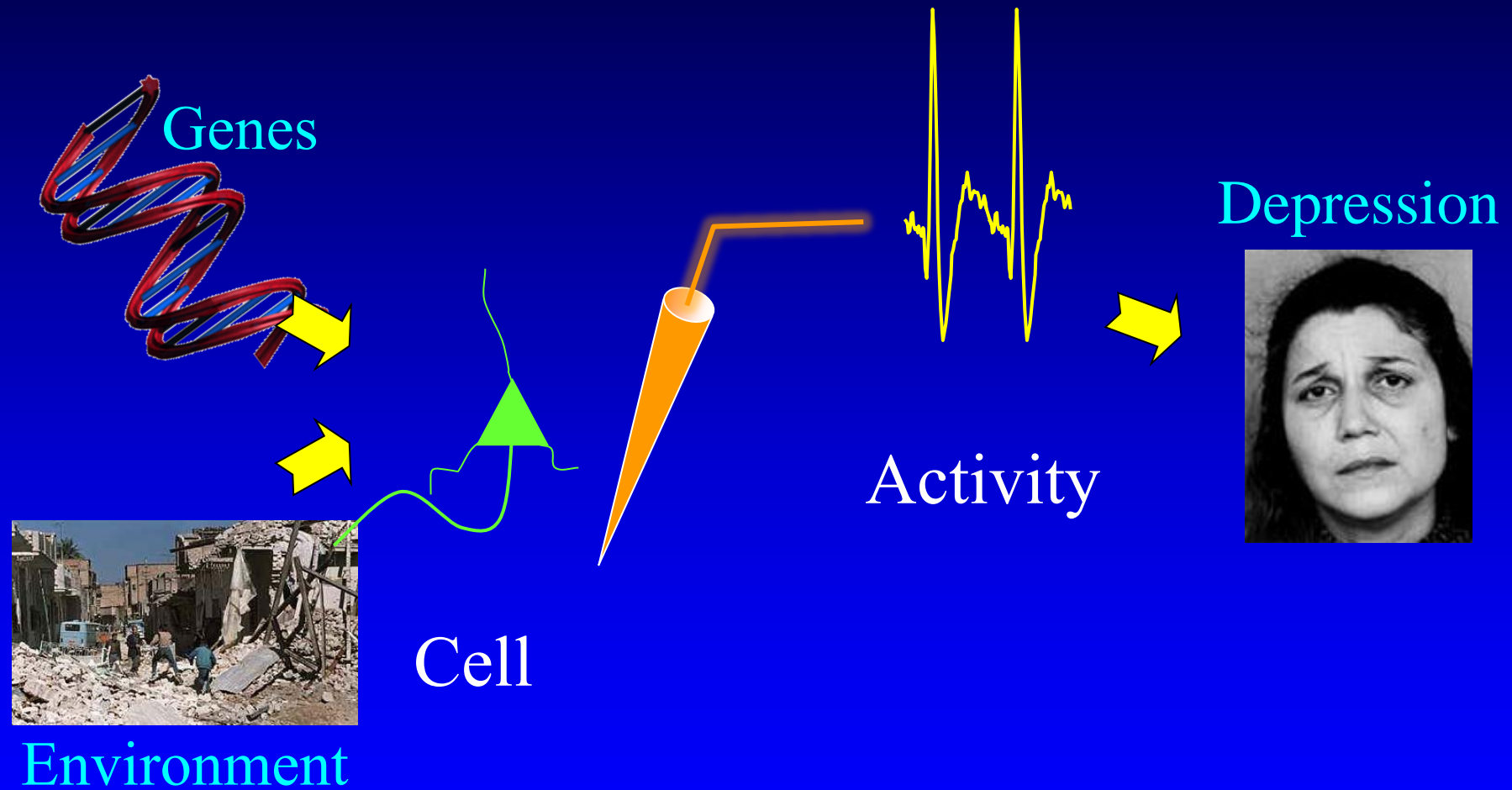
Joshua A. Gordon

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Department of Psychiatry, Columbia University  
and the  
New York State Psychiatric Institute

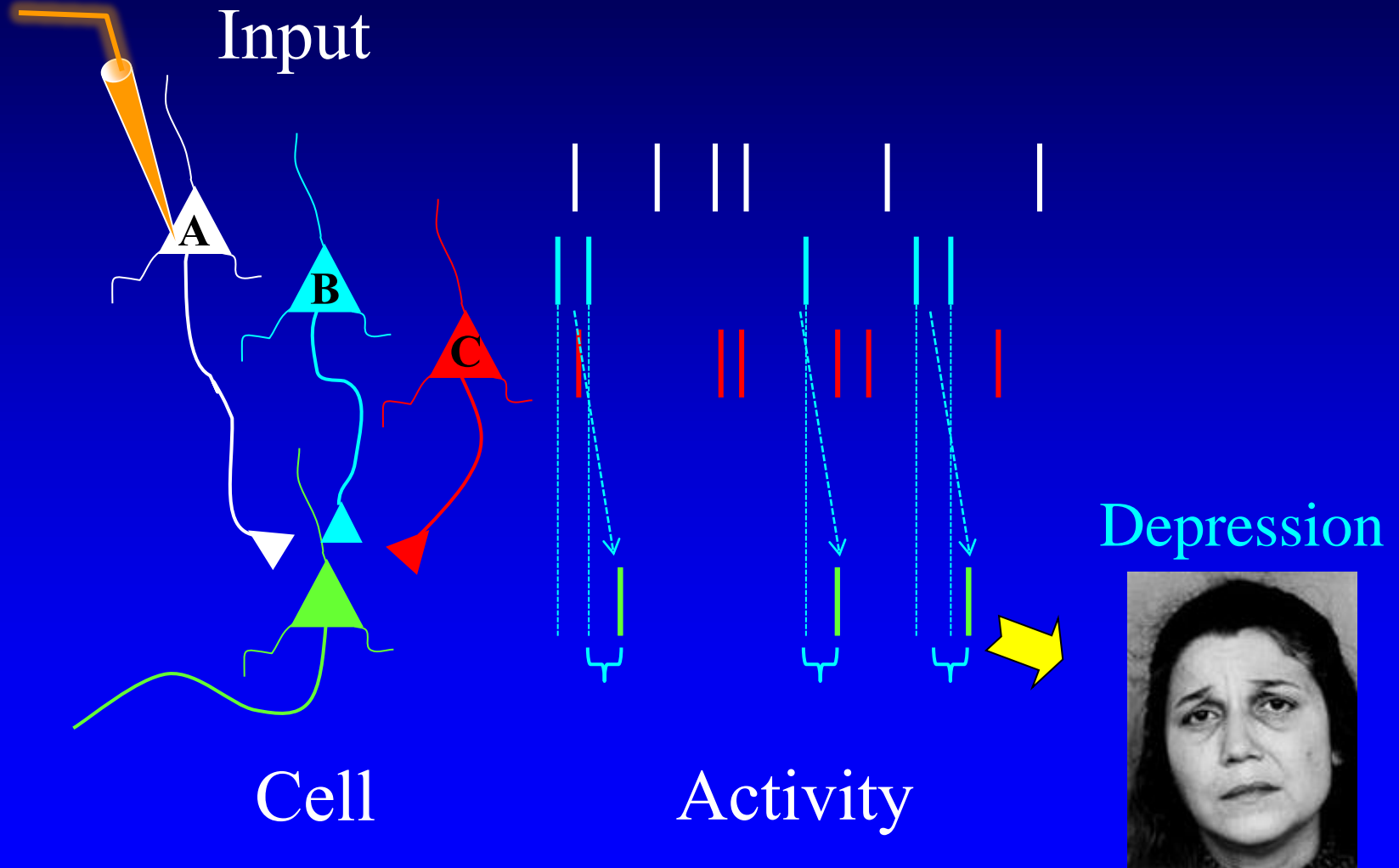
# Approach to Depression



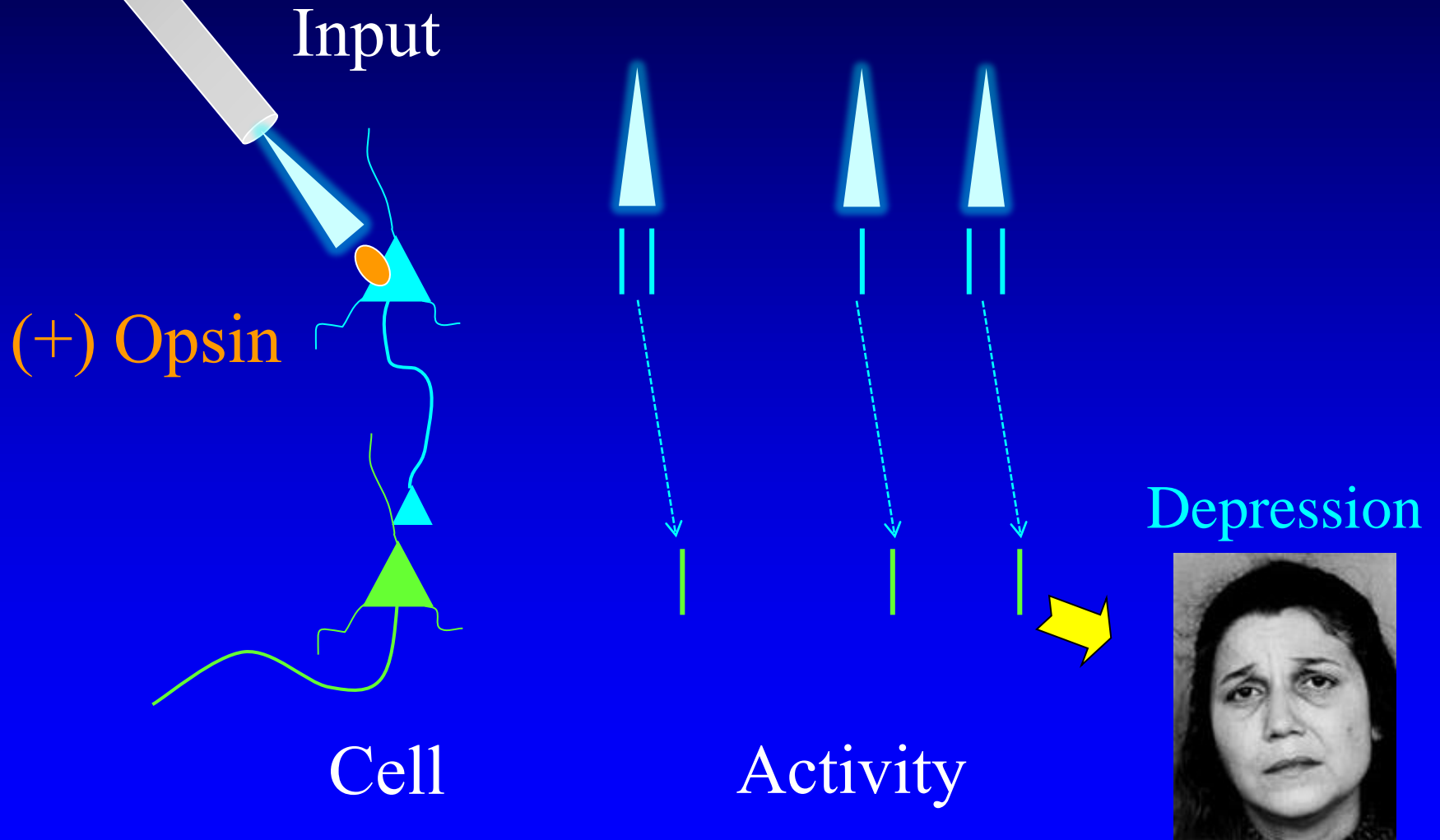
# Electrophysiology: Effects on the Cell



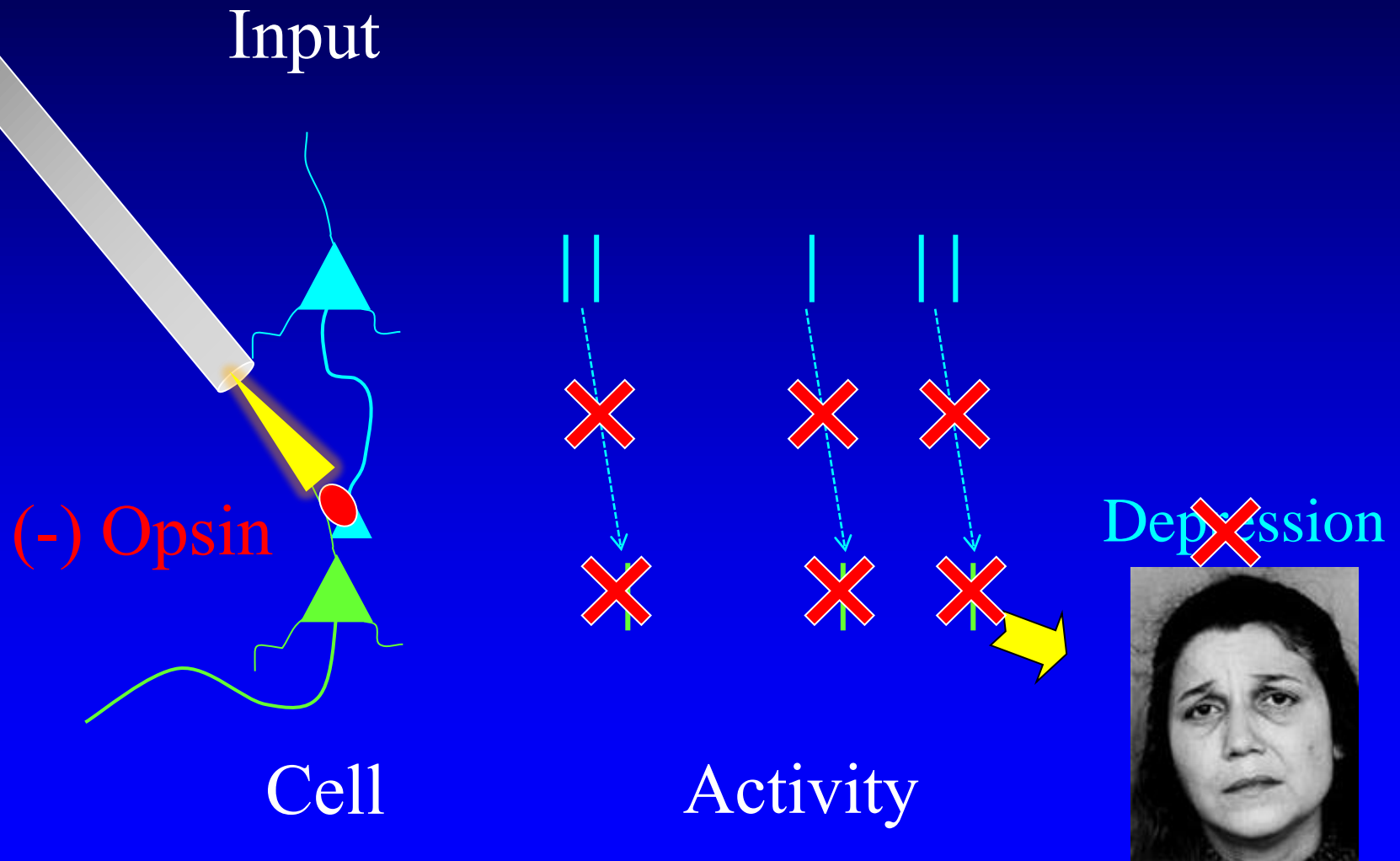
# Electrophysiology: Tracing Circuits



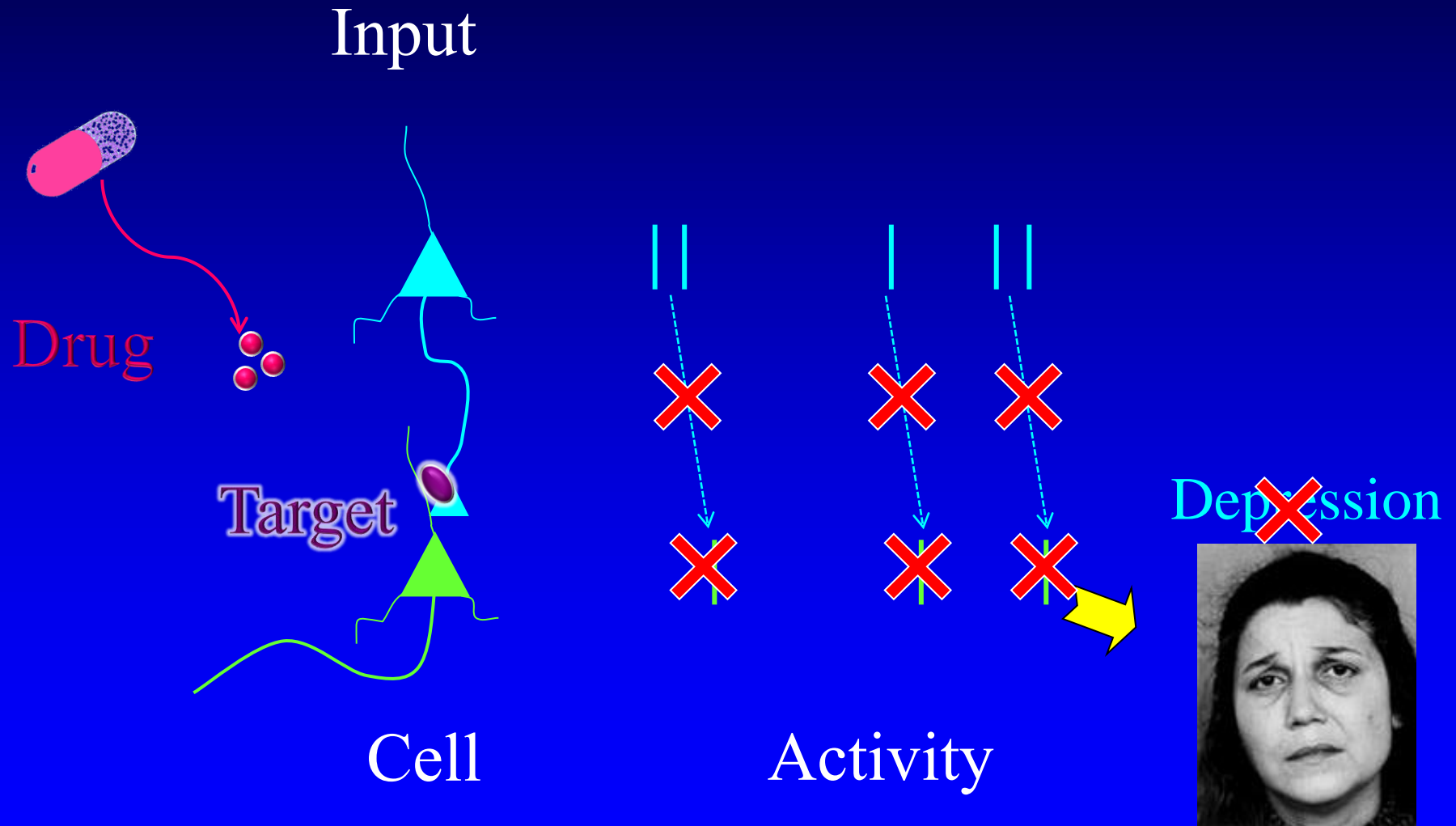
# Optogenetics: Activating Circuits



# Optogenetics: Interrupting Circuits

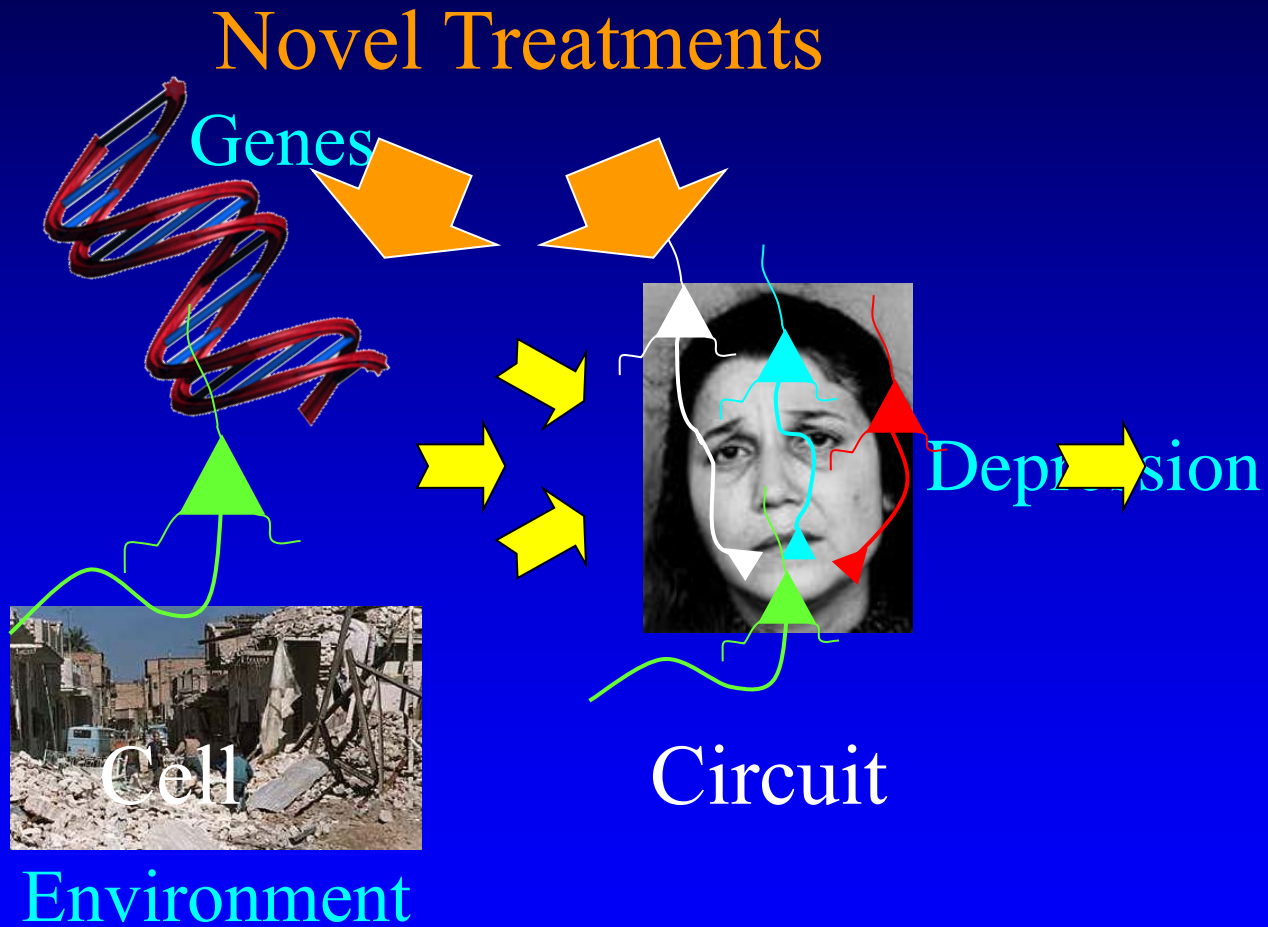


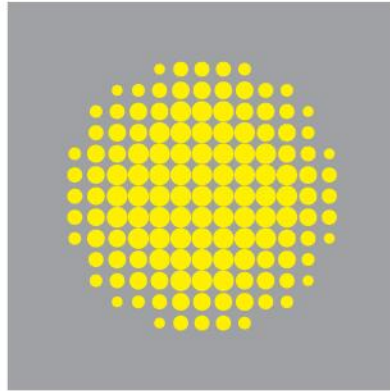
# Circuit-based Treatments





# Circuit Approach to Depression





**HOPE FOR DEPRESSION**  
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