

UNIVERSIDADE FEDERAL DE UBERLÂNDIA**Ficha de Disciplina****DISCIPLINA: Aspectos celulares, moleculares e funcionais das células endoteliais e do músculo liso vascular.**

PERÍODO:	CURSO: Programa de Pós-graduação em Biologia Celular e Estrutural Aplicadas	DEPARTAMENTO: Departamento de Farmacologia – DEFAR.	
CÓDIGO : PBC-040	CH: : 45 horas	CR: 3 créditos	Mestrado: optativa

Requisitos (disciplinas pré ou co-requisitos, nº de créditos, outros) – sem pré-requisitos**Objetivos gerais da disciplina**

O tônus vascular determina o fluxo sanguíneo regional e participa na manutenção da pressão arterial; ele é modulado por fatores intrínsecos e extrínsecos aos vasos sanguíneos. Dentre os fatores extrínsecos podem ser citados os hormônios circulantes e a tensão de cisalhamento imposta pela corrente circulatória. Por outro lado, a produção local de substâncias dilatadoras e constritoras, principalmente pelas células endoteliais, constitui o principal fator intrínseco relacionado à manutenção do tônus vascular. A intervenção farmacológica desse processo constitui importante abordagem terapêutica em diversas doenças. Considerando a relevância do tema, a presente disciplina tem por objetivos propiciar a aquisição de conhecimentos fundamentais sobre a fisiologia, bioquímica e farmacologia das células endoteliais e da musculatura lisa vascular.

Ementa do programa

1. Fisiologia da contração do músculo liso vascular.
2. Mecanismos de transdução do sinal nas células endoteliais e na musculatura lisa vascular.
3. Fatores de relaxamento e de contração derivados do endotélio.
4. Disfunção endotelial.
5. Intervenção farmacológica do tônus muscular.
6. Considerações metodológicas no estudo do tônus vascular.

Bibliografia

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PROEPE 408

Descrição do programa

Mecanismos envolvidos na contração e relaxamento da musculatura lisa vascular.

Endotélio e tônus vascular: aspectos gerais.

Endotélio: óxido nítrico.

Endotélio: prostanoídes e hiperpolarização derivada do endotélio.

Endotélio: endotelinas e junções.

Endotélio: sensores mecânicos e regiões especializadas da membrana.

Endotélio e o sistema renina-angiotensina-aldosterona.

Disfunção endotelial.

Métodos empregados no estudo do tônus vascular.