2017 MGG7400 Molecular Biology of Cellular Signaling (2 credits)

Friday at 2:30-4:10 pm, in Rm. 3140 Scott Hall
From January 13 to April 28, 2017 (Jan: 13, 20, 27; Feb: 3, 10, 17, 24; March: 3, 10, 24, 31; April: 7, 14, 21, 28)

Course director: Kezhong Zhang, PhD (office hours: 2:00-5:00 pm Thursday & Friday)
Associate Professor
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Tel. (313) 577-2669
Email: kzhang@med.wayne.edu


Recommended additional reading: Select readings will be provided via Blackboard

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<th>Date</th>
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<tr>
<td>13</td>
<td>January — NF-κB signaling</td>
<td>L</td>
<td>Rishi</td>
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<td>20</td>
<td>January — NF-κB signaling</td>
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<td>27</td>
<td>January — JNK/MAP Kinase signaling</td>
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<td>February — JNK/MAP Kinase signaling</td>
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<td>February — ER Stress and Unfolded Protein Response</td>
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<td>17</td>
<td>February — ER Stress and Unfolded Protein Response</td>
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<td>24</td>
<td>February — Cell Cycle Control Signaling</td>
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<td>Finley</td>
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<td>March — EXAM1</td>
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<td>March — Subcellular Compartmentation</td>
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<td>March — Spring Break</td>
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<td>24</td>
<td>March — Leptin signaling in metabolism</td>
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<td>31</td>
<td>March — Leptin signaling in metabolism</td>
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<td>April — Programmed Cell Death Signaling</td>
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<td>14</td>
<td>April — Wnt/beta Catenin signaling</td>
<td>L</td>
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<td>21</td>
<td>April — Cellular Contacts and Signaling</td>
<td>L</td>
<td>Sheng</td>
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<td>April — EXAM2</td>
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Description of the course:
The MBG7400 Course “Molecular Biology of Cellular Signaling” contains lectures covering the fundamental topics of cellular signaling and includes the background information related to Wnt/beta catenin signaling, JNK/MAP kinase/NF-κB, subcellular compartmentation of signal transduction, ER stress and unfolded protein response, cell cycle control, PPAR signaling in metabolism, programmed cell death, and cellular contacts. The course also contains student presentations in Journal Club format based on preassigned scientific articles on current topics in cellular signaling.

Two written examinations will be given:
1) 3 March, 2017; 2) 28 April, 2017.

All examinations will consist of series of questions to which concisely but comprehensive answers are requested integrating material given during the course. Each exam will account 35% towards the final grade. Each student will give a J Club-type presentation on preassigned scientific articles. These presentations will account for 30% of the final grade.

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