## EPIGENTICS-BIOC6753 (Spring 2014)

**Instructor**  
Dr. Ramanjulu Sunkar (Raman)  
Room 359 NRC, 744-8496  
ramanjulu.sunkar@okstate.edu  
Tuesday and Thursday at 2:00  348B NRC

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<tr>
<th>Date</th>
<th>Topic</th>
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<tr>
<td>January 14</td>
<td>Introduction</td>
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<tr>
<td>January 16,21</td>
<td>Chromatin structure-overview of epigenetic-based modifications</td>
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<td>January 23,28</td>
<td>Different classes of small RNAs and their biogenesis in plants and animals</td>
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<tr>
<td>January 30</td>
<td>Small RNAs: Identification</td>
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<td>February 4</td>
<td>Target prediction and validation</td>
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<td>February 6,11</td>
<td>RNA silencing machinery (Drsoha, Dicers, Argonautes, HEN1 and Pol iv)</td>
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<tr>
<td>February 13</td>
<td>1st Exam</td>
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<td>February 18,20,25,27</td>
<td>Small RNA functions in Plants</td>
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<td>March 4,6,11,13</td>
<td>MicroRNA and PiRNA functions in animals</td>
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<td>March 18, 20</td>
<td>Spring break</td>
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<tr>
<td>March 25, 27</td>
<td>DNA modifications and modifying enzymes</td>
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<td>April 1</td>
<td>DNA modifications and modifying enzymes</td>
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<td>April 3,8,10,15</td>
<td>Histone code and histone modifying enzymes</td>
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<td>April 17</td>
<td>Cancer epigenome</td>
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<td>April 22</td>
<td>Genomic imprinting</td>
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<td>April 24</td>
<td>RNAi applications in plants and animals</td>
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<td>April 29</td>
<td>epigenetics-based therapeutics</td>
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<td>May 1</td>
<td>epigenome editing and its applications</td>
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