# 2017 Faculty Advisor Request form for Graduate Student Position

**Location:** Wake Forest University

<table>
<thead>
<tr>
<th>Project Title:</th>
<th>Engineering dimeric aptamer complexes for delivery of drugs, radionuclides, and for immunotherapy</th>
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<tbody>
<tr>
<td>Position Need:</td>
<td>1 MS/PhD (PhD preferred), start May or August 2017</td>
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<tr>
<td>Funding:</td>
<td>Funding pending</td>
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</tbody>
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**Advisor**

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**Project description:** Aptamers have antibody-like affinity but are derived by a process of selection from large pools of random DNA or RNA sequences. My laboratory has pioneered use of dimeric aptamer complexes for high-capacity drug delivery (U.S. patent 9,486,533). I propose further development of dimeric aptamer complexes for drug delivery by extending the range of drug molecules for which this approach can be applied. I also have initiated collaborative projects to use dimeric aptamer complexes for targeted delivery of radionuclides to image and treat cancer and for immunotherapy.

**Other notes:** This project is multi-disciplinary and you will have an opportunity to work with structural biologists, chemists, radiochemists, and cancer biologists.