Outline

1. The role of randomization in establishing relationships.

2. Testing whether a screening test for depression helps primary care physicians to diagnose depression. Will doctors recognize depression status within twelve months of first visit?

<table>
<thead>
<tr>
<th>Group</th>
<th>Recognized</th>
<th>Not recognized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depressed, Doctor told</td>
<td>20</td>
<td>28</td>
</tr>
<tr>
<td>Depressed, Doctor not told</td>
<td>11</td>
<td>41</td>
</tr>
<tr>
<td>Not depressed</td>
<td>4</td>
<td>56</td>
</tr>
</tbody>
</table>

3. Headlines.

   - Sexism Pays
   - Fan in room cuts SIDS
   - Breast Implants Boost Suicides
   - Certified Teachers Boost Student Scores
   - Eating Pizza Cuts Cancer
   - Wearing a helmet puts cyclists at risk
   - Credit cards make you fat
   - Deep-voiced men have more kids
   - Tooth loss in elderly linked to mental impairment

4. Miscellaneous issues concerning chi-square

   (a) Conditions for inference
   (b) Degrees of freedom
   (c) After $H_0$ is rejected, then what?