Course handouts July 12 14:30-15:30

**Rapid Chemical Analysis and Field Screening Methods**

*Prof. Marya Lieberman, Department of Chemistry and Biochemistry*

*University of Notre Dame, Notre Dame IN 46556 USA*

*mlieberm@nd.edu, skype: maryalieberman, phone: 574.631.4665*

**Presentation notes**

Lecture objective: Describe scientific principles, strengths, and weaknesses of methods used to screen pharmaceuticals outside the lab

0) General principles and goals of field testing

1) Packaging analysis

 principles

 strengths

 weaknesses

 2) CDx (US Centers for Disease Control)

 principles

 strengths

 weaknesses

 3) Chemical color tests

 principles

 strengths

 weaknesses

 4) MiniLab

 principles

 strengths

 weaknesses

 5) Paper Analytical Device (PAD)

 principles

 strengths

 weaknesses

 PAD for quantitative assay of beta lactam antibiotics

 case study: Amoxicillin

 6) PharmaChk

 principles

 strengths

 weaknesses

7) Followup of field screening

**One thing I learned is:**

**One question I have is:**