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:**