



Biostatistics & Medical Informatics/Statistics 546
Practicum in Biostatistics, Animal Science Room 150
Professor: Dr. Rick Chappell, chappell@biostat.wisc.edu
Teaching Assistant: Scott Hetzel, hetzel@biostat.wisc.edu



Guest lecturers:

Dr. David DeMets, demets@biostat.wisc.edu

Dr. Ron Gangnon, ronald@biostat.wisc.edu

Dr. Sunduz Keles, keles@biostat.wisc.edu

Dr. Rob Lemanske, rfl@medicine.wisc.edu

Week 1 6/8-6/12

6/8 Types of Clinical Studies (DeMets)
6/9 How to download and get started with R (Hetzel)
6/10 R lecture and lab practice (Hetzel)
6/11 R lecture and lab practice (Hetzel)
6/12 Study replication; VEST and congestive heart failure
 Subgroup analysis; PRAISE I and PRAISE II trials in congestive heart
 failure (DeMets)

Week 2 6/15-6/19

6/15 Intent to Treat (ITT) Principle; Anturane Reinfarction Trial (DeMets)
6/16 R lecture and lab practice (Hetzel)
 Data analysis projects handed out by Dr. Chappell
6/17 Surrogate Outcomes; Cardiac Arrhythmia suppression trials (DeMets)
6/18 R lecture and lab practice (Hetzel)
6/19 Fraud in Clinical Trials (DeMets)

Week 3 6/22-6/26

6/22 R lecture and lab practice (Hetzel)
6/23 Introduction to genomic analysis (Keles)
6/24 Survey of methods for genomic analysis (Keles)
6/25 Survey of methods for genomic analysis (Keles)
6/26 R lecture and lab practice (Hetzel)

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| Week 4 | 6/29-7/3 |
| 6/29 | Medical background of the COAST Study (Rob Lemanske) |
| 6/30 | Descriptive statistics, one- and two-sample inference using the COAST data (Gangnon) |
| 7/1 | Descriptive statistics, one- and two-sample inference using the COAST data (Gangnon) |
| 7/2 | Epidemiologic study designs and interpretation: Sleep apnea and hypertension (Gangnon) |
| 7/3 | Epidemiologic study designs and interpretation: Sleep apnea and hypertension (Gangnon) |

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| Week 5 | 7/6-7/10 |
| 7/6 | R lecture and lab practice (Hetzel) |
| 7/7 | The Second Hong Kong Nasopharyngeal Carcinoma Trial and survival outcomes (Chappell) |
| 7/8 | Estimating survival curves for censored data, applied to HKNPC02 (Chappell) |
| 7/9 | The Cox proportional hazards model, applied to HKNPC02 (Chappell) |
| 7/10 | R lecture and lab practice (Hetzel) |

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| Week 6 | 7/13-7/17 |
| 7/13 | R lecture and lab practice (Hetzel) |
| 7/14 | Group Project collaboration |
| 7/15 | Group Project collaboration |
| 7/16 | Group Project Presentation(s) |
| 7/17 | No class/Farewell Lunch |