

# Week 1

Monday, 2 August 2021 23:33

INTRODUCTION by REBECCA WAITAM

BEING A ITINERANT BIOLOGIST  
FROM MICROBE TO MICROBE

PATRIC PROJECT (BRC BIOINFORMATIC RESEARCH CENTER)

PATHOSYSTEM RESOURCE INTEGRATION CENTER

VIRUSES  
BACTERIA  
EUKARYOTES  
VECTORS

ANYTHING THAT HAS A SEQUENCED  
GENOMES INTO GENBANK

PRIVATE WORKSPACE  
YOU CAN PUT PERSONAL DATA

ASSEMBLY  
ANNOTATION  
COMPREHENSIVE ANALYSIS  
BLAST  
PHYLOGENETIC TREES  
SIMILAR GENOME FINDER  
PROTEIN FAMILY SORTER  
PROTEOME COMPARISON

} COMPARATIVE  
-OMICS

WEBSITE OR CLI (COMMAND  
LINE  
INTERFACE)

## DATA

HOW WAS IT GATHERED  
HOW IT IS ANALYZED  
WHAT CAN WE DO WITH IT

## WORKSPACES

## METADATA USEFUL TO FIND STUFF

PHYLOGENY

TAXONOMY

GENOMES

SEQUENCES (INDIVIDUAL CONTIGS)

FEATURES (INDIVIDUAL GENES)

PROTEIN FAMILIES

PATHWAYS

SUBSYSTEMS (LINKING TOGETHER G.O.I.)

TRANSCRIPTOMICS

INTERACTIONS

### SPECIALTY GENES

{  
 VIRULENCE FACTOR  
 ANTIMICROBIAL RESISTANCE  
 PROTEINS  
 TRANSPORTERS  
 DRUG TARGETS  
 HUMAN HOMOLOGS

[PATRICbrc.com](http://PATRICbrc.com)

FREE BIOINFORMATIC TOOLS

OVERVIEW

REGISTERING

WORKSPACE

SHARING A WORKSPACE

SHARING A GENOME

COPYING GENOME ANNOTATION