An excellent source of yeast protocols can be found here: http://cshprotocols.cshlp.org/cgi/collection/yeast

A primer on using yeast by Fred Sherman is here: Sherman_Starting_with_yeast.pdf

A more general molecular biology protocols are here: http://cshprotocols.cshlp.org/site/misc/subject.xhtml

Media & Recipes

- Common Yeast Media (YPD, SC, and the like)
- 1000x Metals
- 1000x Vitamins
- 10L of 10x Nitrogen limited salts
- 1L of 10X Phosphate Limitation Salts
- 1L of 10x Carbon Limitation Salts
- 100mM Nitrogen Stocks
- Glucose Limiting Media
- Nitrogen Limiting Media
- Phosphate Limiting Media
- Leucine and Phosphate Limiting Media
- Leucine and Uracil Limiting Media
- Nitrogen Agarose Plates
- Variable Nitrogen Source Limitation Carboy
- Denhardt's Media
- D-His/D-Ser Plates
- Soft Agarose
- YPG(YEPG OR YEP-GLYVEROL)

Growth and Growth Assays

- Coulter Counter
- Colony Counter
- Sixfors Chemostat
- Chemostat Protocols
- SYTO9 & PI FACS Viability Assay
- FACs-based analysis for competition experiments
- FUN-1 Metabolic Activity Assay
- Benomyl Assay
- Competitions in the ministats

Yeast Cytometry

Fixing

- Ethanol fix
- Filter & PFA fix, lyticase digest, etOH permabilization
• Old-school (field standard) fix, digest, permeabilization for immuno or FISH applications

Probing/Staining

• DNA content flow cytometry with Sytox Green
• Amine/sulfhydryl staining (protein content proxy) with FITC
• polyA staining using singly-labeled FISH
• mRNA single molecule FISH with Stellaris-style probes
• FISH for FACS applications, using Quantigene probes (BFF)
• RNA content flow cytometry with RNAsytoSelect

RNA (and Expression Analysis)

Extracts, purifications, and enrichments:

• Yeast RNA Extraction (growing)
• RNA extraction from yeast, a different version (2016)
• RNA extraction from stationary phase yeast (thicker cell wall)
• Proteinase K-mediated extraction of RNA from yeast
• DNase treatment of RNA
• polyA selection
• Ribominus selection
• ecoli RNA extraction

cDNA for expression analysis:

• Making cDNA for Transcriptome Analysis - primarily microarray
• cDNA synthesis with M-Mulv RT - primarily for qPCR
• RT qPCR (deprecated)
• RT qPCR workflow

RNAseq

• RNA-Seq (directional) rnaseq RNAseq
• Nextera Based RNASeq using ds cDNA from polyDT primers
• Nextera Based RNASeq using ds cDNA from Random Hexamers

4tU labeling related methods

• Making spike-ins, linearizing and in-vitro transcription
• HPDP Biotinylation of 4tU labeled RNA
• Streptavidin Pull-down of Biotinylated-HPDP-4tU RNA
• Dot Blot Assay

Analysis

• Separation of RNA by electrophoresis or Denaturing gel (formaldehyde) or Non-denaturing RNA gel
• Transfer of Denatured RNA to positively charged nylon membrane
• Preparation of an Exemplary RNAlater- RNA Preservation Medium

DNA

• Quick yeast gDNA extraction for PCR-based applications
• High Throughput DNA extraction with PureLink™Pro 96
• Hoffman Winston DNA Prep
• Southern Blot Analysis
• Bar-seq Barseq (high-throughput analysis of competing mutants, see Robinson, Chen, Storey, and Gresham 2014)
• low-input barseq, aka SoBaSeq for amplicon-sequencing of dead sorted cells
• DNA fragmentation
• Ethanol precipitation/concentration of DNA

DNAseq

• DNA Library Preparation Using Nextera tagmentation
DNA Library Preparation For Illumina Sequencing (Update 05/2013 - Naomi Ziv)
DNA Library Preparation For Amilicon Misq Sequencing (Updated 04/2014 - Jungeui Hong)
Barcoded Library PCR for Illumina sequencing

DNA Microarrays - for cDNA from RNA, see above section
  - Hybridization Mix
  - Affymetrix Tiling Arrays
  - Slide Stripping Protocol Agilent Yeast Arrays
  - Agilent Custom Mutation Detection Tiling Microarrays

  - qPCR with SybrGreen
  - using the tapestation

Molecular Biology
  - Measuring DNA using SYBR Green
  - Biobricking Protocol Overview
  - Bioanalyzer protocol links, info
  - TAP reagents
  - TAP protocol
  - DIG 3'-end labeling
  - Detection of DIG labeled nucleic acid
  - Annealing Oligonucleotides
  - Non-denaturing polyacrylamide gel electrophoresis (PAGE gel)
  - E. coli transformation
  - Messing about with vectors, using PCR and NEB HiFi assembly
  - Glucose Assay
  - Gibson Assembly

Yeast Techniques
  - PCR-based Yeast allele replacement methods
  - Colony PCR
  - Dapi Staining and Morphology
  - Sporulation / tetrad dissection
  - Mating / mating type halo assay
  - Using the Pinner to transfer the Yeast Deletion Collection to new plates
  - Sonicator
  - High Efficiency Transformation Protocol
  - Density Fractionation and Trehalose & Glycogen Assay

Experimental Evolution
  - Experimental evolution in chemostats

DGseq sequencing analysis
  - DGseq sequencing adapter information
  - Deduplicating a bam file using umi-tools
  - DGseq demultiplexing
  - DGseq removal of PCR duplicates reads

RATE-Seq
  - RATE-Seq Protocol
  - RATE-seq Bioinformatic Analysis

Submitting stuff to the SRA
Theme Songs, Chants, Incantations

- I'm GlycoBlue
- Qubit Song
- RiboZero Song
- Lost My Controls Again
- All the single labels