

## Introductory Image Analysis Course

### Image Analysis Basics

#### Pages 1 - 5

1. Before you begin
2. Sample preparation
3. Camera resolution
4. Gray image
5. Color image
6. Binarization using gray levels
7. Binarization using color
8. Bitplane layer
9. Important factors for binarization

### Shading Correction

#### Pages 7 - 13

1. Adjusting your microscope
2. Setting the white balance
3. Checking the illumination level
4. Adjusting exposure time
5. Setting the SC
6. Using the Pseudo Color but

#### Exercise

#### Page 15

Create a shading corrector

### Calibrating Your System

#### Pages 17 - 18

1. When to calibrate
2. Camera alignment
3. Calibration steps

#### Exercise

#### Page 19

Calibrate your objectives

### Manual Editing Tools

#### Pages 21 - 25

1. Bitplane editing tools
2. Annotation tools
3. Direct measures

## Intermediate Image Analysis Course

### Overview of Vision Windows

#### Pages 1 - 7

1. Menu items
2. Clemex window buttons
3. Workspace tabs
4. Image window
5. Routine window & toolbox
6. Results window
7. Data browser
8. Bitplane viewer
9. Explorer window
10. Stage pattern window
11. Design mode vs Run mode

### Building a Routine

#### Pages 9 - 12

1. What is a routine?
2. Acquisition
3. Gray or color operations
4. Gray/binary transformations
5. Binary operations
6. Measurements
7. How the toolbox is organized
8. Toolbox icons

#### Exercise

Metallo: Nodularity B  
Pharma: Particle Size

### Measurements & Results

#### Pages 13 - 19

1. Relative measures
2. Field measures
3. Object measures
4. Object transfer by limits
5. Direct measures in a routine
6. Measurement related tools
7. Printing results
8. Exporting data
9. Saving results

#### Exercise

Metallo: Coating B  
Pharma: Needle Length

### Performing a Complete Run

#### Pages 21 - 24

1. Complete run on a sample using a saved routine
2. Saving a series of images
3. Complete run on saved images
4. Prolog and epilog sections

#### Exercise

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Create stage pattern