Release Notes
Image-Pro v11.1

New Features

- 2D AI Deep Learning Module (Optional).
- AI Deep Learning Prediction for Segmentation.
- AI Deep Learning Trainer for training models.
- AI Deep Learning Model Browser.
- Most Protocols updated to support AI Deep Learning.
- Pre-trained AI Deep Learning Models.
- AI Deep Learning support for Cellpose, StarDist and UNET models.
- EM Protocols based on AI Deep Learning.
- Protocols will run natively on composite images.
- Brush and Eraser tools.
- Added Brush Tool to Manual Measurements.
- Brush Tool supports merging and editing existing objects.
- Brush Tool supports overlapping object/area classes.
- Implemented a Save As with Frame-by-Frame option for image sequences.

Improvements

- More explicit Tool Tips
- Updated interface for Balloons
- Improved text visualization in Dark Mode
- Easier to locate Measurement Types Help page
- Composite image channel blinking controls removed
- Zoom added to Bitmap View
- Scale Bar display control is unified between Data and Annotation overlays
- Scale Bar may be displayed on a color composite image
- Import Set Builder includes an additional time dimension option
- Increased flexibility to associate images using Import to create an image set
- OME-TIFF and MCS sets will now be saved with LZW compression
- Objective Imaging .sws file format updated to support multi-channel images
- Crosshair Overlay enabled on image sets
- Live Overlays enabled on image sets
- Annotations enabled on image sets
- Macros are now searchable from Search Results
- Updated segmentation panels
- Single Manual segmentation icon with dropdown for bright and dark
- Counting and counting in Protocols are enabled on Composite images
- Floating Point image calculations between image sets is enabled
- Manual measurements are supported on color composite images
- Protocol Browser panel updated
- The Protocol Save As includes description field and tags

- Updated Protocol interface
- Data Collector Summary table for reporting multiple image statistics
- Segmented objects are more visible using the Edit Measurement Range
- Added Smart Segmentation to Object Tracking feature
- Features Manager supports transfer of overlays to color composite images
- Network License Server supports Image-Pro v10 and v11 on a single server
- Allow Nicknaming of License Bundles in the License Manager
- Offline linking and access provides a link to the License Manger download location
- Restored password protected identities
- Improved Image-Pro load time
- Added support for CoolLED pE-400 and pE-800 light sources
- Capture Light Channel Emission Wavelength Color selector change to a color slider
- Improved selectivity of circular overlays and measurements
- The Progress Meter Cancel button performance improved
- Cancel button added to application Progress Meter
- Experiment loading includes a Progress Meter
- Image-Set thumbnail creation is faster when loading an experiment
- Notification Bell icon to indicate new messages and notifications
- Help and Quick Start Guides shortcuts added to Start menu

Resolved Issues

- Replaced older prompt dialog when no Image-Pro license is found.
- Resolved error opening .stk files.
- Corrected issue importing OME Tiff multi-file sets composed of multiple time points and Z stacks.
- Resolved file opening issue of .nd2 and .stk files generated by VisiView 5.0/6.0.
- Updated Zeiss .czi file format support for Cell-Discoverer multi-well plate data.
- Updated file opening support for OME Tiff images using JPEG compression.
- Addressed metadata issue in LAS AF v3.x .lif files.
- Tiles from ND2 files with XY tile information are assigned to the Scan dimension.
- Updated support for Shimadzu CT scanner images.
- Adding a project reference to a dll is now saved.
- Docked panel icons display correct state.
- Corrected a time lapse time interval display inconsistency.
- Fixed missing metadata issue for Zeiss .zvi files.
- Unified Scale Bar controls to show correct display state and to toggle on/off.
- Corrected Slicer View display of ZY and XZ slice images if volume is a specific number of planes.
- Removed redundant solitary radio buttons in Material Protocols collection.
- Improved CoolLED pE-800 wavelength selection control speed.
- Fixed macro recording error to export pie charts and other measurement charts.
- Fixed incorrect Saturation display when applied to 32-bit floating-point images.
- Updated Dye List for support of additional Molecular Probes dyes.
- Updated error message when using a mis-matched measured PSF image for deconvolution.
- Corrected Auto-recover image crash when recovering an image with a name containing multiple periods.
- Resolved a failure to return a license to the license server under certain conditions.

- Deconvolution Batch Processing settings are being applied to all images during deconvolution.
- Updated Data Collector histogram statistics to work with composite images.
- Fixed issue of 3D Angle and Center measurement types changing volume and volume percent measurement when present.
- IQM files report the same results regardless of if the image is first saved and closed or deleted and not saved.
- Corrected various Japanese translation issues.
- Fixed using File/Open to select a shortcut and having it attempt opening it as an image.
- Edited scripting project loads in correct state.
- Addressed Quick Save for Publication image location path macro issue.
- Resolved macro recording issue of threshold values.
- 3D deconvolution of image folders and sub-folder will ignore unsupported file types.
- File/Import will properly set the dyes for each channel of the image set.
- Caliper tool will measure the entire circular or enclosed object.
- Resolved error in License Manger Click to Copy ULC code.
- Normalization works correctly when tiling non-rectangular tile layouts.
- Fixed macro recording of capturing acquisition of an image operation.
- Corrected Real Time Deconvolution Weiner filter memory leak.
- TrueUpdate icon replaced with correct icon.
- Resolved Layer Thickness protocol shut down when using large images and Magic Wand.
- Registration checking is turned off when no internet connection exists.
- MS Teams conflict resolved when sharing the application.
- Fixed data reporting mismatch between data table and pie chart in Live Dead Total protocol.
- Resolved spelling error in Cell Count protocol.
- Reduced time to cancel measurement operations when invoked.
- Improved display of the recent file names list under File/Open/Recent.
- Heterogeneity and Clumpiness measurement Types work with manual measurements on VLI images.
- Resolved camera white balance failure.
- Fixed Median filter operations on multi-frame images.
- Hidden ribbon groups remain hidden after restarting Image-Pro.
- Improved Dark Mode text visibility.
- Fixed issue with light sources working COM ports higher than 9.
- Background correction is applied to the ROI when present.
- Particle Size Analysis multiple site report is working correctly.
- Updated default values for composite image histogram stretch.
- Adjust Display and Mini Histogram now all share the same Best Fit Low and High settings.
- Restrict Grow and Dilate operations respect ROI boundaries.