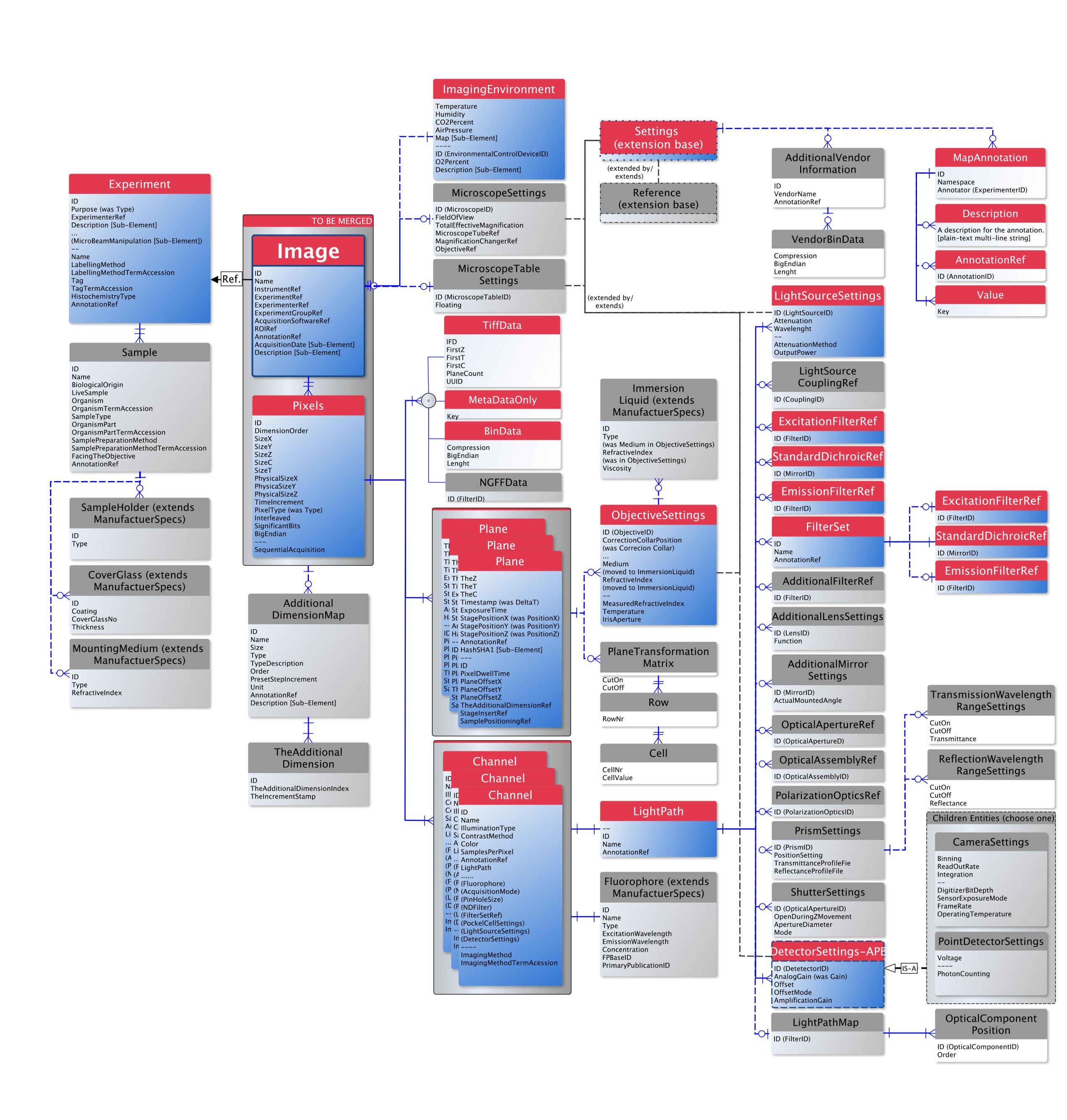
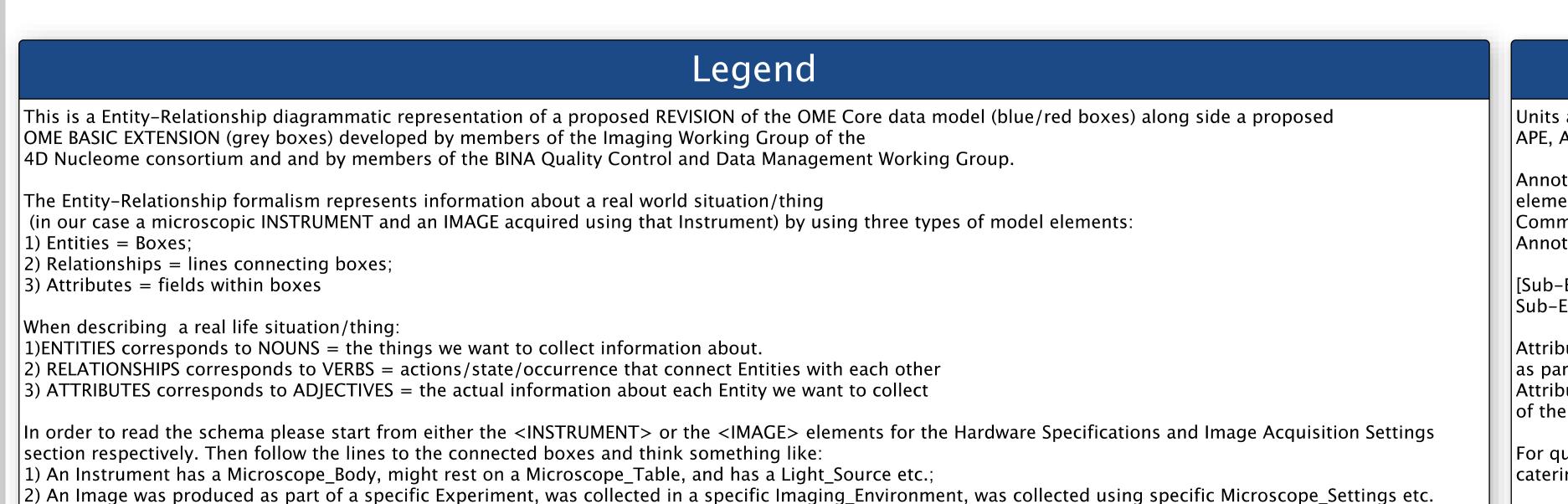
## OME Core vs. 4DN-BINA-OME Basic Extension ıminationWavelength Microscope HARDWARE Specifications PeakWavelength IlluminationPower WavelenghtProfileFile [Sub-Element] Filament D (LightSourceID) GenericExcitationSour MicroscopeStand-AP MapAnnotation [Sub-Element] 🗲 IlluminationPower PeakWavelength Laser WavelenghtProfileFile [Sub-Element] RepetitionRate ProjectionAngle EnvironmentControl FrequencyMultiplication lluminationWavelend (Wavelength) (PockelCell) MicroscopeTable ModulationMechanism CO2Control PeakWavelength O2Control VibrationControl WavelenghtProfileFile [Sub-Element] Acousto-OpticalDeviceRef LidMaterial MinTemperature TemperatureAccuracy MultiLaserEngine WavelenghtProfileFile [Sub-Element] LightSource-APE SingleMode NumberOfLasers TemperatureControlled AnnotationRef FilterRef AnnotationRef MultiportSwitchTime Children Entities Children Entities Laser [Sub-Element] ID (FilterD) (choose on (choose one \_\_\_\_\_ LensRef Name Children Entities (choose one) Positioning-APE MechanicalStage ID (LensID) LightSourceCoupling-AP LightGuide XYMaxVelocity XYRepetability PiezoelectricStage IS-A XTravelRange ID (MirroringDeviceID) ZMaxVelocity NumericalAperture | XYPositionLinearityError Transmittance ZRepetability XYSettlingTime CouplingLensRef AcceptanceAngle ZTravelRange AnnotationRef XYResolution Geometry ID (OpticalApertureID) ZPositionLinearityError MaterialName Children Entities \_\_\_\_\_ ZSettlingTime OpticsHolderRef FocusingDevice-APE WaveguideMode Objective MovementAxes Diameter ID (OpticsHolderID) \_\_\_\_\_\_ ObjectiveTurret FreeBeam RotationAngle PolarizationOpticsRef ZDrive ImmersionType Focusing AnnotationRef Correction DirectMount ID (FilterID) ·----ID (PolarizationOpticsID) ID (FilterID) MountType Magnification CalibratedMagnification IndividualObjective FocusStabilizationDevice PrismRef Focusing WorkingDistance AcquisitionSoftware Children Entities ID (PrismID) PiezoElectric (boolean) (extends Software) (choose on Mechanism ExcitationFilterRef LightType TwoStep BeamExpander ID (FilterID) Wavelength ContrastModulation AnnotationRef PhaseContrastType StandardDichroicRef WebsiteURL CorrectionCollar PrimaryPublicationID \_\_\_\_\_\_ Collimator orrectionCollarType ID (MirroringDeviceID) ntFocalLength Condenser EmissionFilterRef ckFocalLenght ParfocalizingDistance ObjectiveViewField Launguage ID (FilterID) AnnotationRef Instrument ExcitationFilterRef MicroscopeTube MechanicalLength AnnotationRef StandardDichroicRef OpticalLenght ildren Entities (choose one) OpticalAperture-APE ID (MirroringDeviceID) (extension base) EmissionFilterRef DarkFieldStop AnnotationRef Children Entities (choose one) Manufacturer ID (FilterID) CenterStopDiameter OpticsHolderPosition \_\_\_\_\_\_ CatalogNumber FilterCubeRef FilterCube ID (FilterCubeID) Design SpecsFile OpticsHolderPosition IrisDiaphragm FilterCubeRef FilterSlider ID (FilterCubeID) MapAnnotation MaxApertureDiameter ID (FilterID) OpticsHolder-AP Information PhaseRing ExcitationFilterRef FilterCubeTurret Namespace PhaseNumber ID (FilterID) Annotator (ExperimenterID) Name CenterStopDiameter AnnotationRef NrOfSlots SlitWidth FilterWheel StandardDichroicRef MirroringDeviceRef FilterCube Description \(\text{AnnotationRef} \) ID (FilterID) VarelRing ID (MirroringDeviceID) ID (MirroringDeviceID) A description for the annotation OpticsTurret [plain-text multi-line string] EmissionFilterRef LensRef Shutter AnnotationRef ID (FilterID) ID (LensID) -----Lens-APE Function ID (AnnotationID) PolarizationOpticsRef ResponseTime Children Entities (choose one) Motorized ID (PrismID) Value ID (PolarizationOpticsID) MaxApertureDiameter Multimode ExcitationFilter Magnification FilterHolderPosition (was FilterWheel) OpticalApertureRef AnnotationRef RefractiveIndex Children Entitie ID (OpticalApertureID) WorkingDistance Name EmissionFilter CoatingMethod (choose one LightPathLocation Composite TransmittanceRange MagnificationChange NeutralDensityFilter AttenuationCoefficient AttenuationCoefficient (deprecated: CutIn, CutOut, AttenuationMethod ImageDistance CutInTolerance, CutOutTolerance) ObjectDistance Transmittance Thickness FrontFocalLength Absorbance AdditionalLens | AngleOfIncidence BackFocalLenght Wavelenght AdditionalFilter | Polarization [Sub-Element] FWHMBandwidth ID (FilterID) RadiusOfCurvature TransmittanceRange BeamExpanderLen MaterialName Coating Wavelenght GlassCode Children Entities (choose one) FWHMBandwidth (was Dichroic) CollimatorLens Transmittance AnnotationRef ReflectingMirror ReflectanceRange AnnotationRef Prism CondenserLens **─**─ Wavelenght Mirror Type ReflectanceProfileFile [Sub-Element] FWHMBandwidth Diameter Reflectance CouplingLens AngleOfIncidence Beamsplitter Children Entities Geometry RadiusOfCurvature ID (FilterID) (choose one Condenser Transmittance SubstrateType OilObjective TransmissionAngle RelayLens SubstrateMaterial Compound Reflectance StandardDichroic GlassCode RefractiveIndex TransmittanceProfileFile [Sub-Element] Reflectance ReflectanceProfileFile [Sub-Element] AngleOfIncidence ID (FilterID) TubeLens DeviationAngle Detector-APE AdditionalDichroic ID (FilterID) PrismAngle (was Detector) CoatingMethod LightPathLocation MaterialName WavelengthRange GlassCode **Children Entities** FilterHolderPosition AnnotationRef Technology PeakWavelength (additional attributes removed (choose on AnnotationRef AttenuationCoefficient or moved to new Detector Settings AttenuationMethod or Laser Scanner classes) PolarizationOptics WavelenghtProfileFile [Sub-Element] AnalogVideo Thickness TransmittanceProfileFile [Sub-Element] Mount ReflectanceProfileFile [Sub-Element] CCD WavelengthRange QuantumEfficiency (\_\_\_\_\_\_ CrossPolarizer ElectronConversionFactor BeamSplitter ReadOutNoise PeakWavelength Children Entities (choose one) CCDArchitecture – – – FaradayIsolator DetectorNoiseModel CutOn RegisterWellCapacity DarkCurrentRate WavelenghtProfileFile [Sub-Element] Construction CMOS Camera-APE AmbientOperatingTemperature | Retardation MaterialName ArrayHeight GlassCode \_\_\_\_\_ PixelWidth Intensified AnnotationRef IS-A PixelHeight Illumination ManufacturerOffset WavelengthRange IntensifierType RegisterWellCapacity PixelWellCapacity PeakWavelength MaximumFrameRate MaximumReadoutRate Children entities (choose one VerticalClockSpeed WavelenghtProfileFile [Sub-Element] (\_\_\_\_\_/ PhotomultiplierTube PointDetector-APE CollectionEfficiency Multianode SignalProcessing MultianodeChannelNr ResponseTime MultianodeArrangement DeadTime RadiantSensitivity PhotoDiode \_\_\_\_\_ GenericDetector PINJunction MapAnnotation [Sub-Element] HybridPhotoDetector ID (FilterID)

## OME Core vs. 4DN-BINA-OME Basic Extension Image ACQUISITION Settings





Units are omitted for simplicity sake.

APE, Abstract Parent Entity

AnnotationRef, This element always refers to a Comment/Annotation element as described for Channel. However for simplicity sake most Comment/Annotation elements have been omitted and the AnnotationRef has been inserted in the referring element as an attribute.

[Sub-Element], For semplicity sake, in some cases Sub-Elements are listed within the referring element as an attribute.

Attributes listed after a --- separator have been added to the OME Core

Attributes listed after a --- separator have been added to the OME Core as part of the proposed revision.

Attributes listed after .... and in parenthesis have been removed as part of the proposed revision.

For questions or comments please contact: caterina.strambio@umassmed.edu