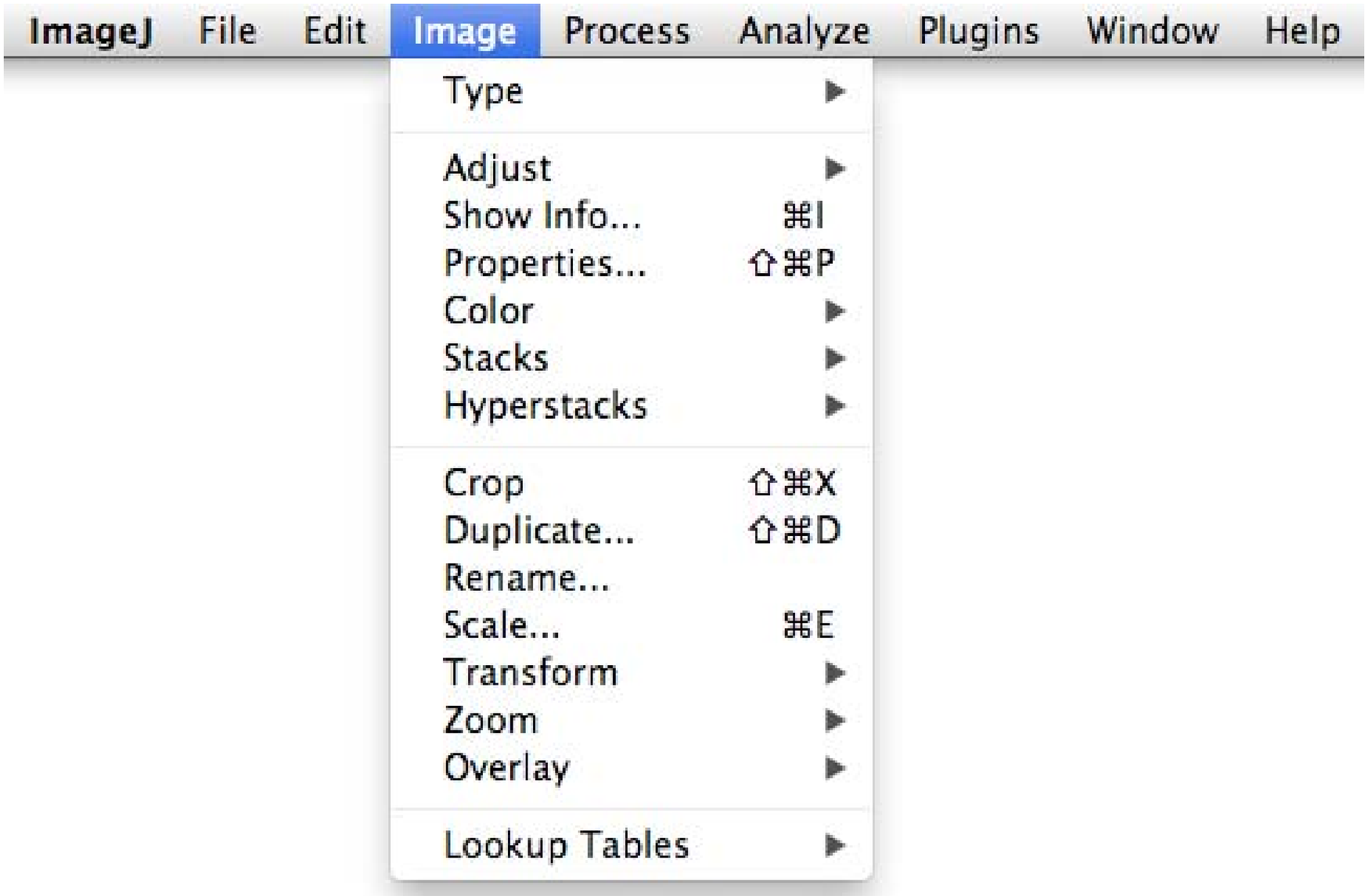
IMAGEJ

— Menu image—

Hugo Gomes | 58536 |
Margarida Gomes | 58523 |
Marta Moreira | 54459 |
Telma Veloso | 58521 |

MENU


ImageJ
File
Edit
Image
Process
Analyze
Plugins
Window
Help
Type
Adjust
Show Info... ⌘I
Properties... ⇧⌘P
Color
Stacks
Hyperstacks
Crop ⇧⌘X
Duplicate... ⇧⌘D
Rename...
Scale... ⌘E
Transform
Zoom
Overlay
Lookup Tables

TYPE

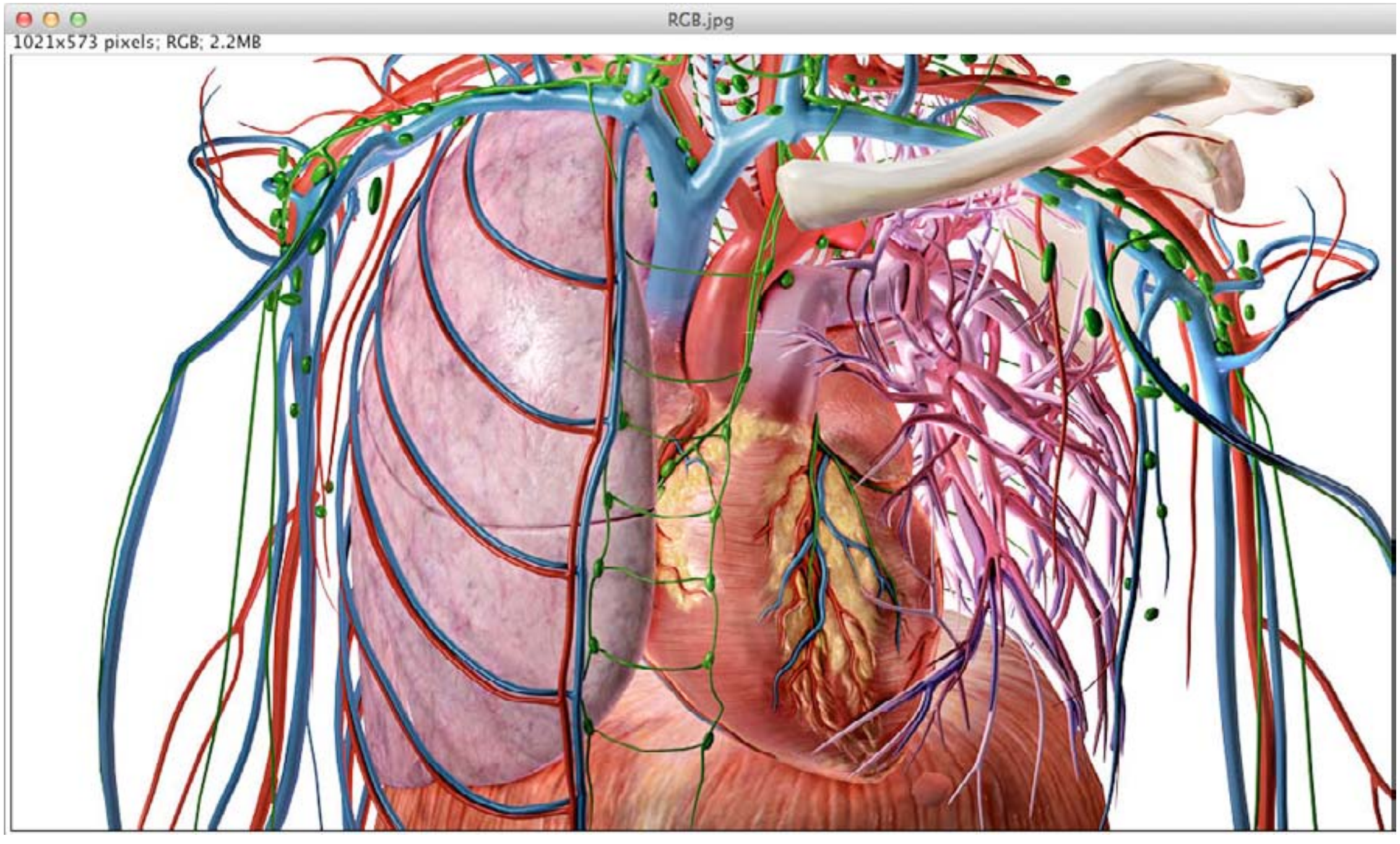
1. CONSULTA DO TIPO DE IMAGEM ACTIVA

2. CONVERSÃO NOUTRO TIPO DE IMAGEM

↓

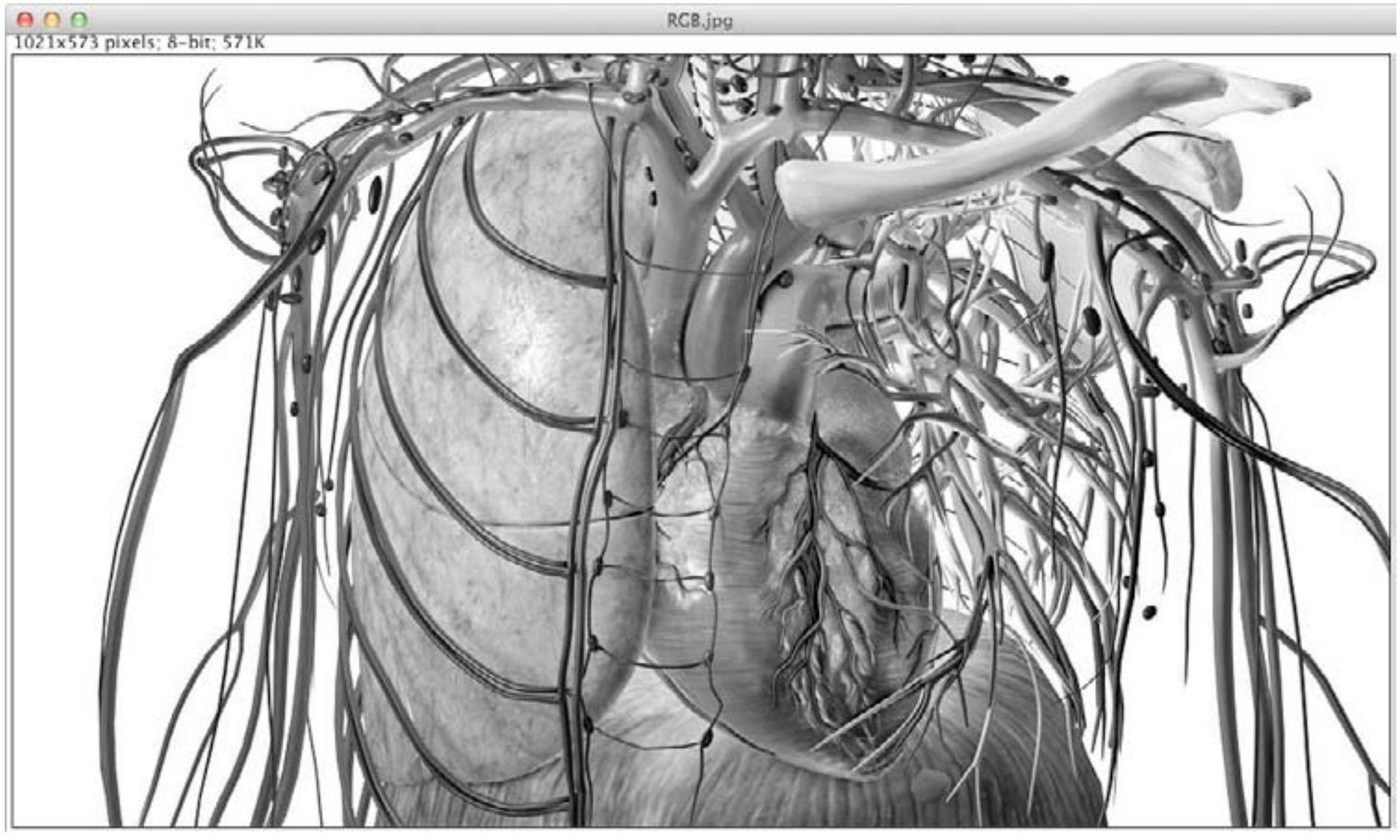
ALGUMAS NÃO SUPORTADAS

TYPE



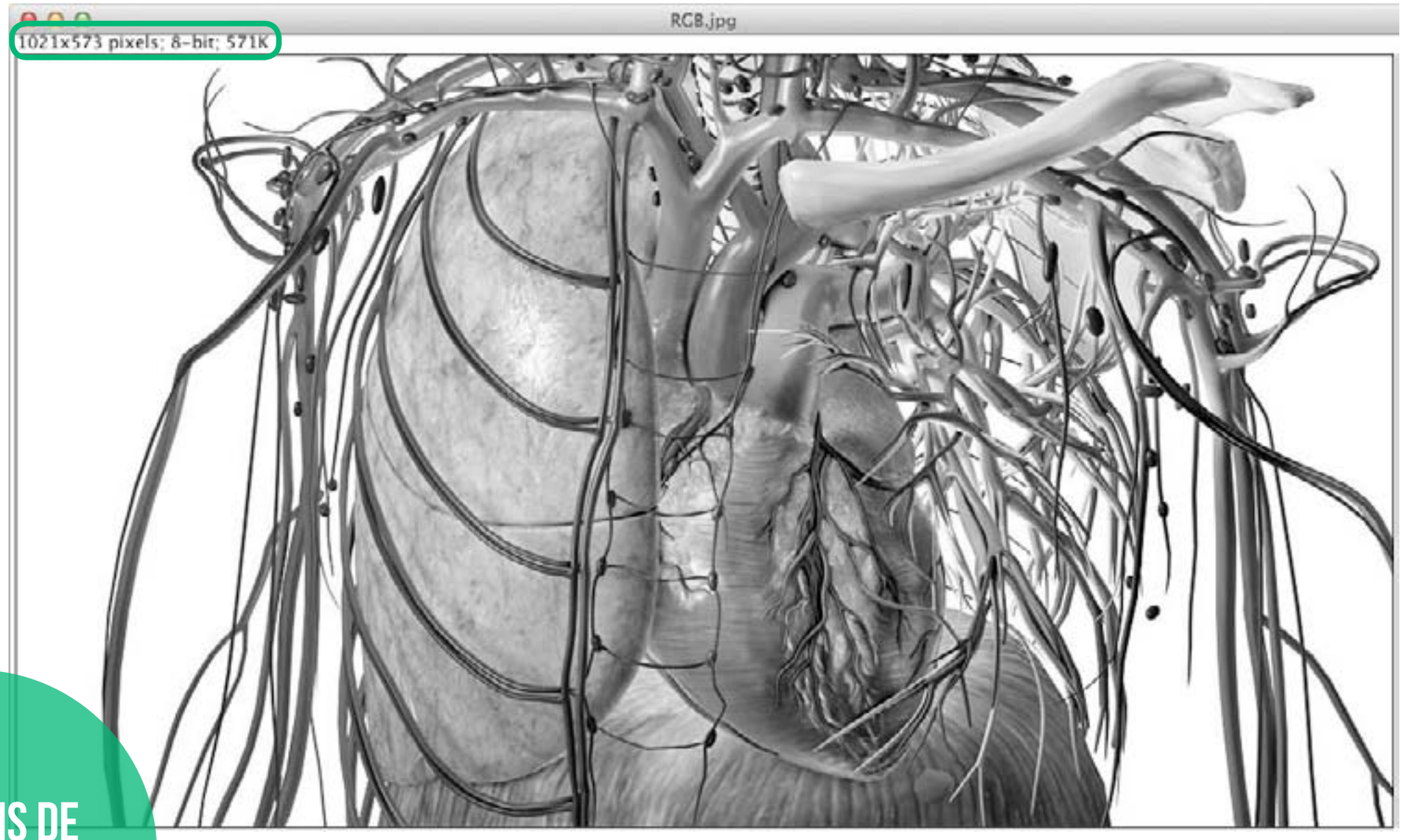
TYPE

8-Bit: Grayscale



TYPE

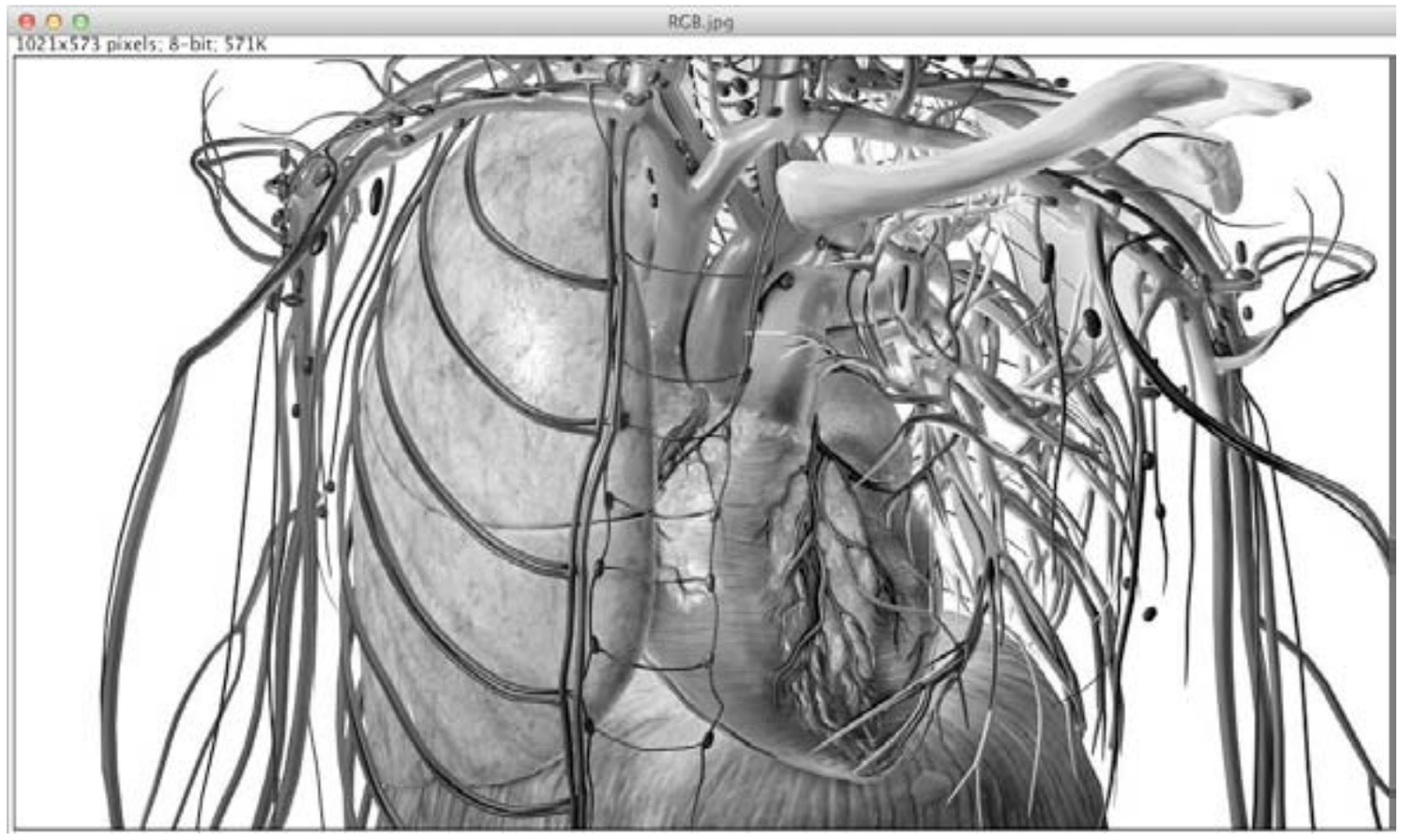
8-Bit: Grayscale



256 TONS DE CINZENTO

TYPE

8-Bit: Grayscale



IMAGENS DE 16-BIT & 32-BIT

Conversão linear para 8-Bit do *min-max* (valores existentes no Display Range - Image> Show Info) para valores [0-255].

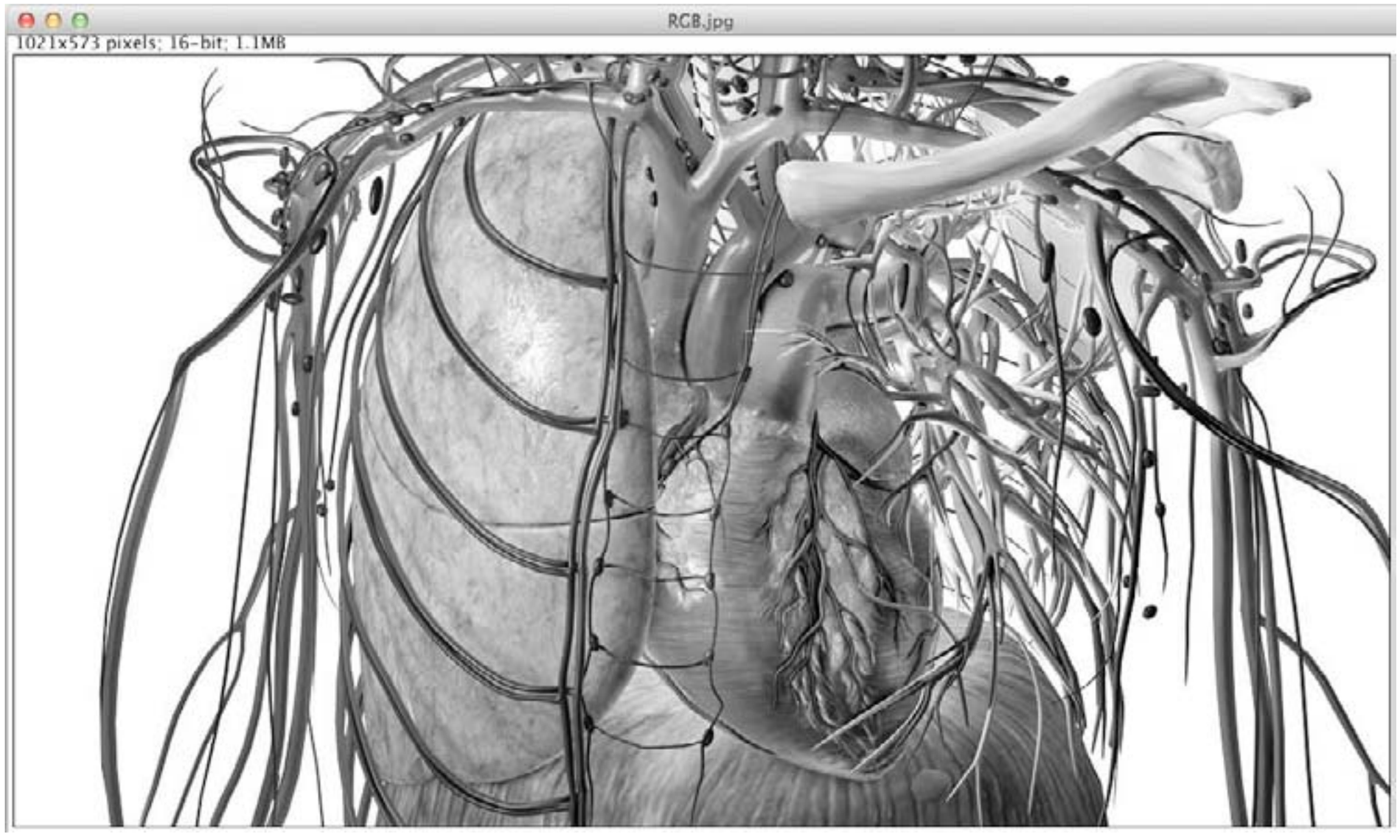
IMAGENS RGB

Cinzento = (Vermelho + Verde + Azul) / 3

Cinzento = 0.299*Vermelho + 0.587*Verde+ 0.114*Azul (*Weighted RGB Conversions* ligado)

TYPE

16-Bit: Grayscale



TYPE

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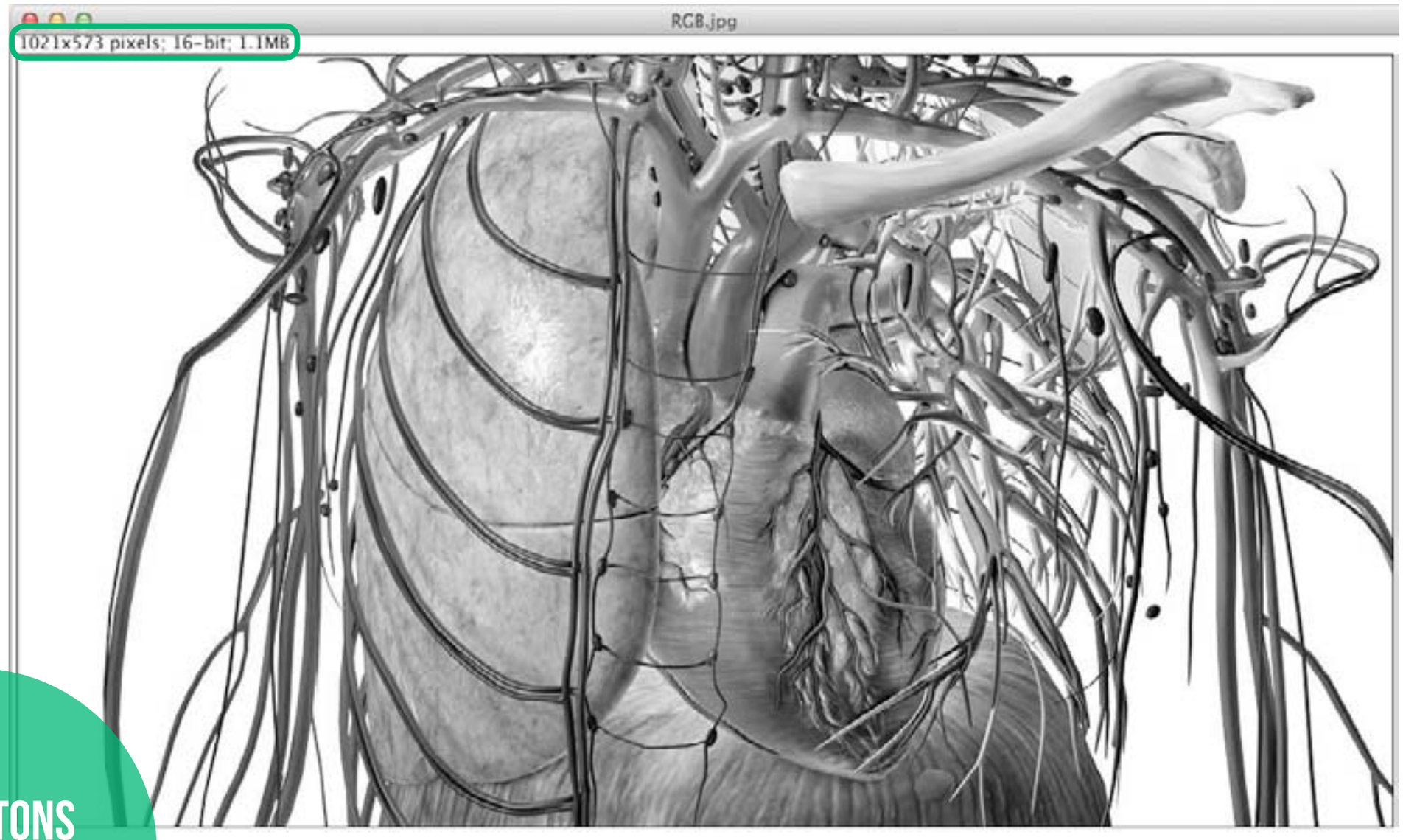
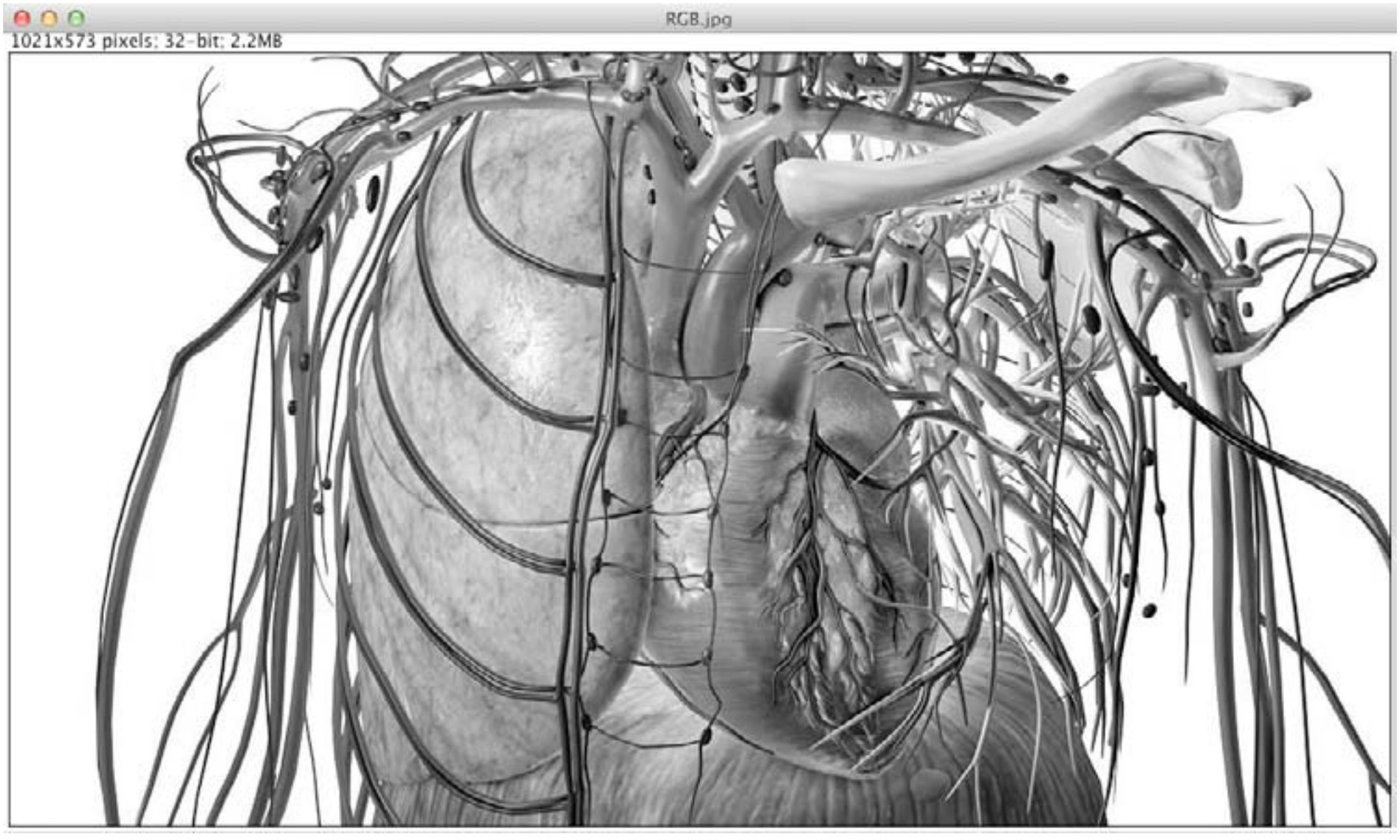


65536 TONS
DE CINZENTO

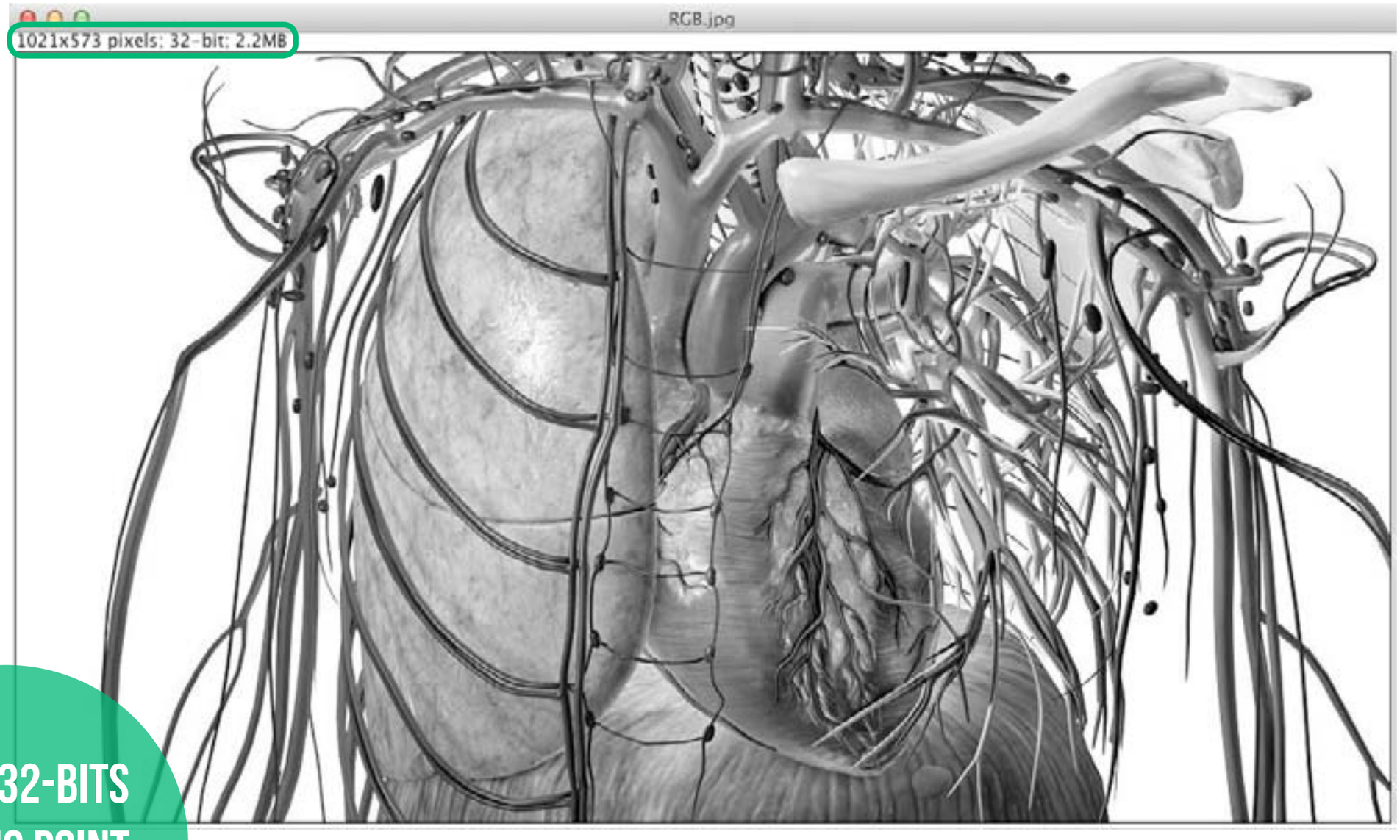
TYPE

32-Bit: Grayscale



TYPE

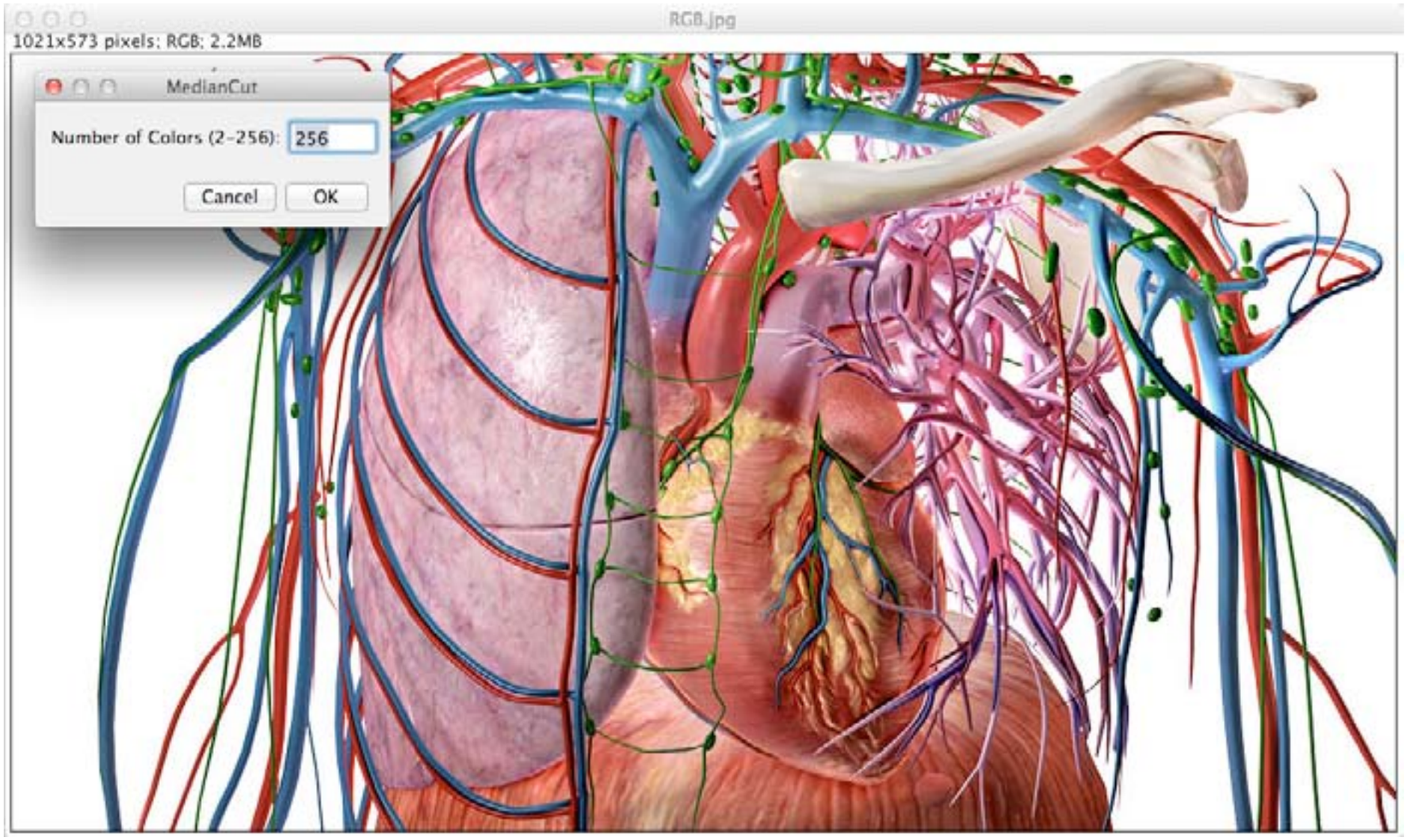
32-Bit: Grayscale



SIGNED 32-BITS FLOATING POINT GRAYSCALE

TYPE

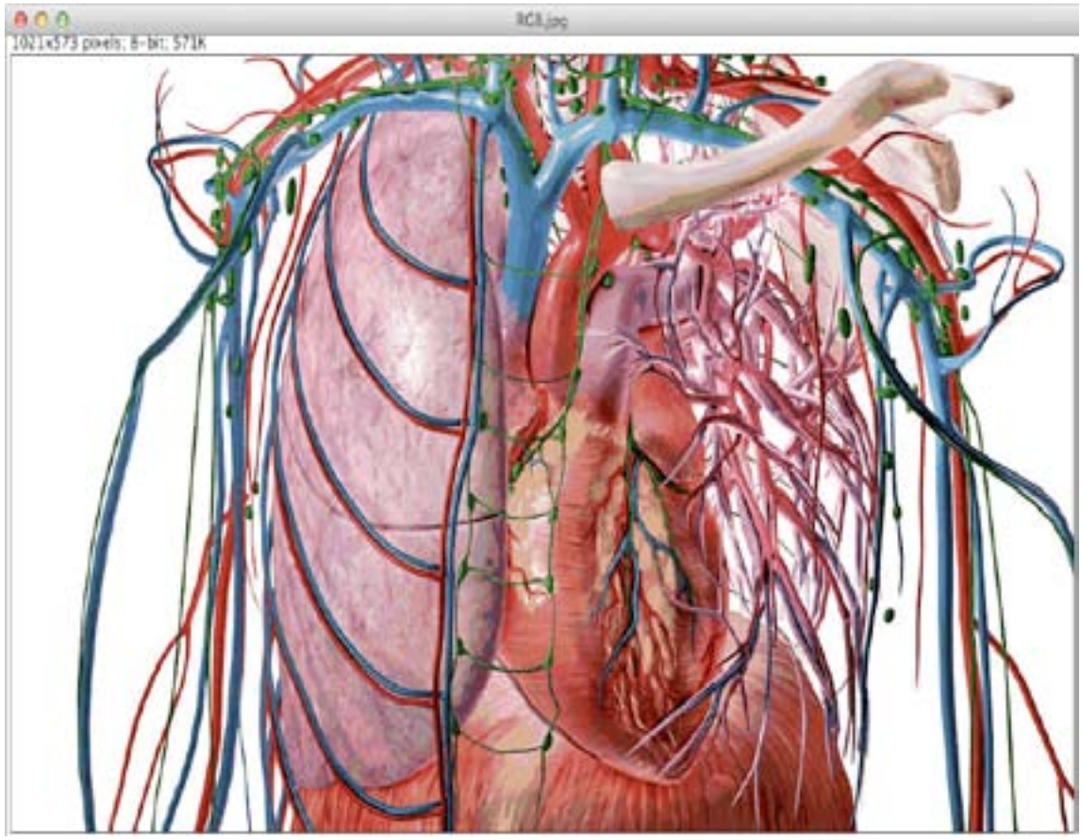
8-Bit: Color



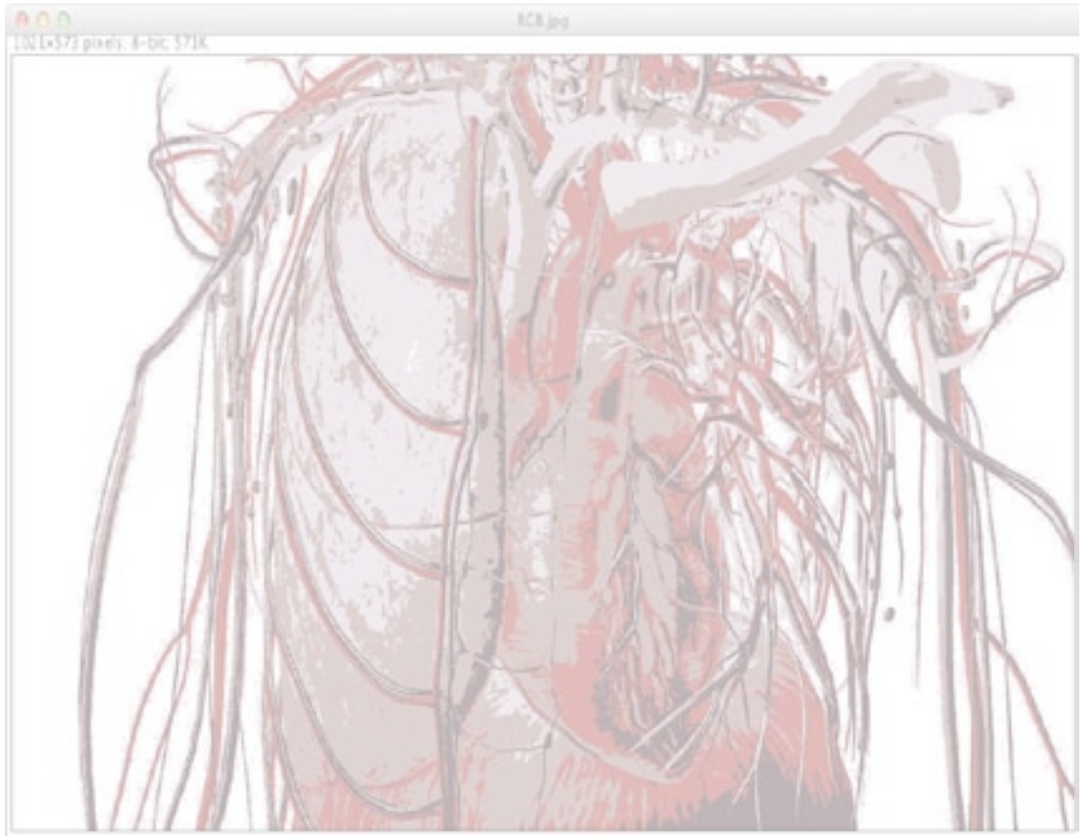
ALGORITMO DE HECKBERT (MEDIAN CUT)

TYPE

8-Bit: Color



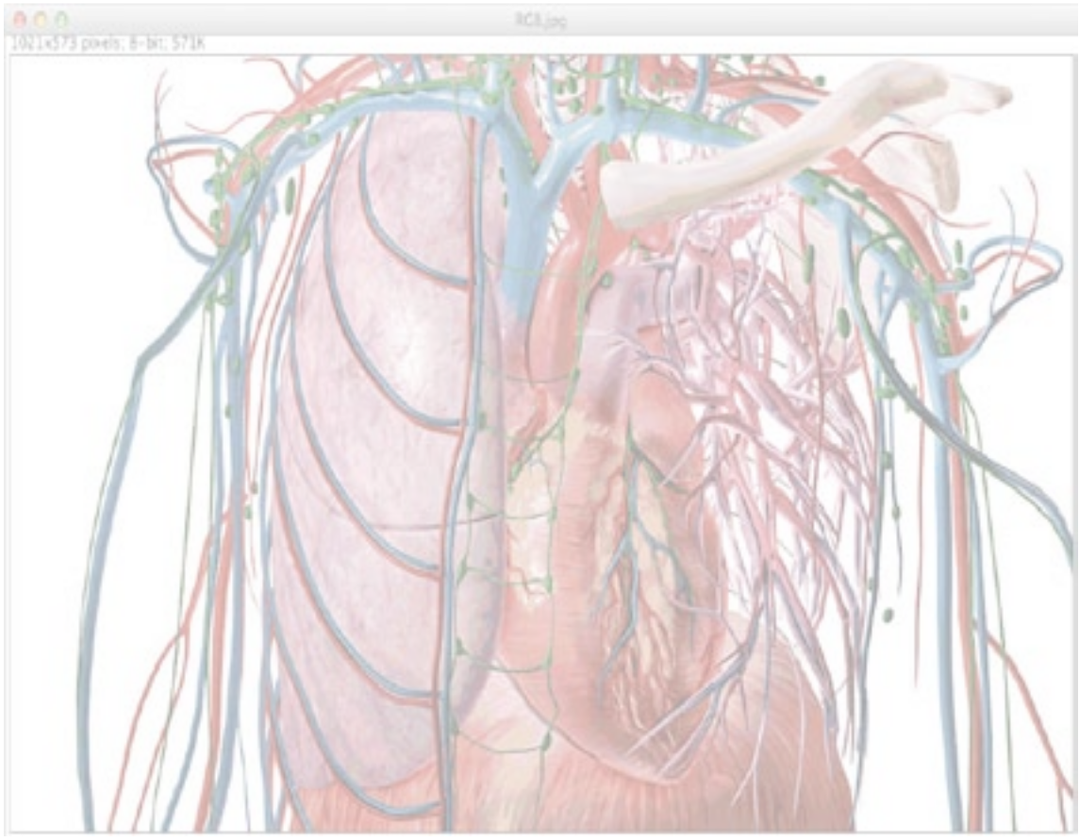
50 CORES



5 CORES

TYPE

8-Bit: Color

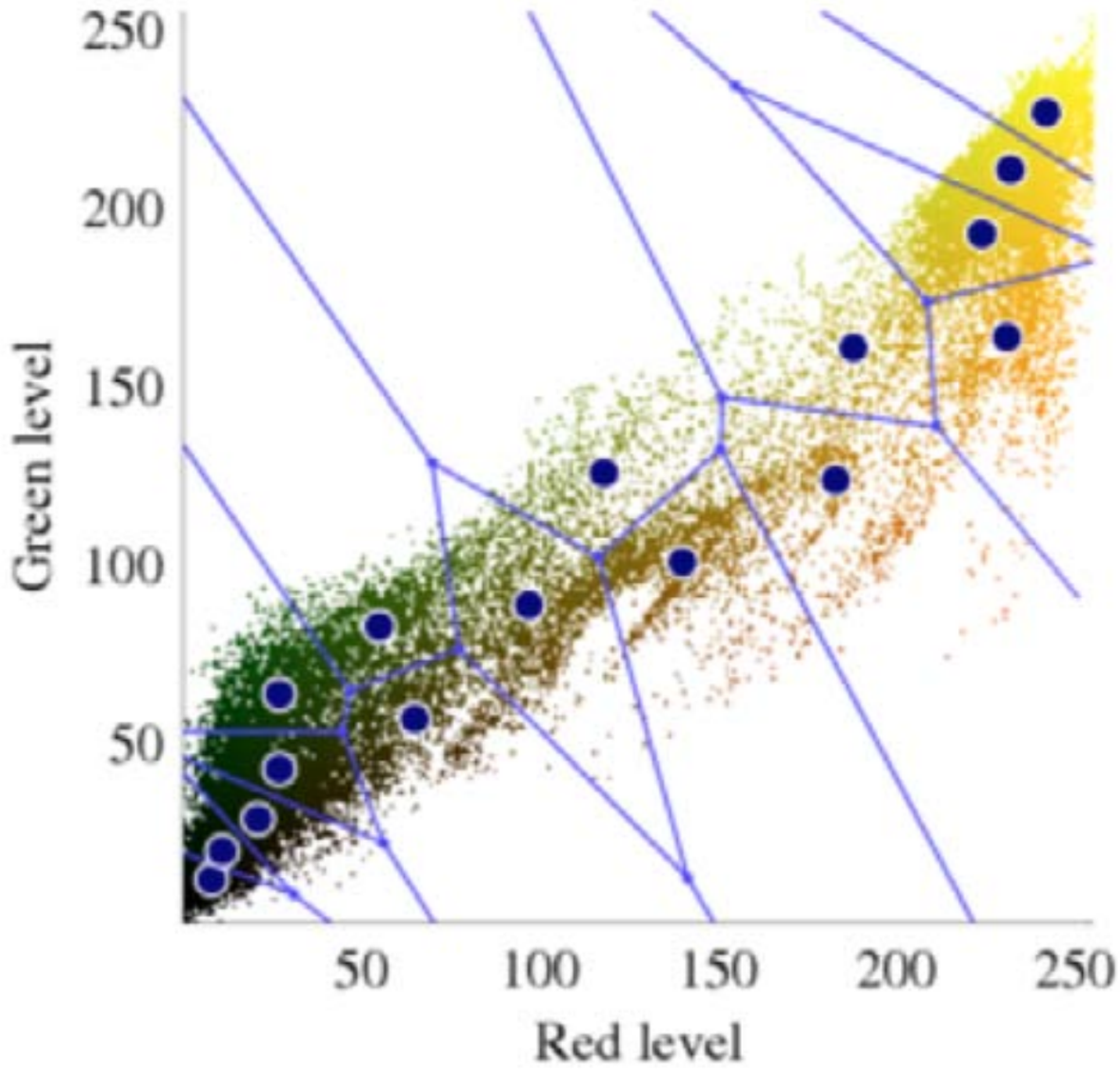


50 CORES

5 CORES

TYPE

8-Bit: Color — Median Cut



TYPE

RGB Color

CONVERSÃO NUMA IMAGEM 32-BIT RGB COLOR

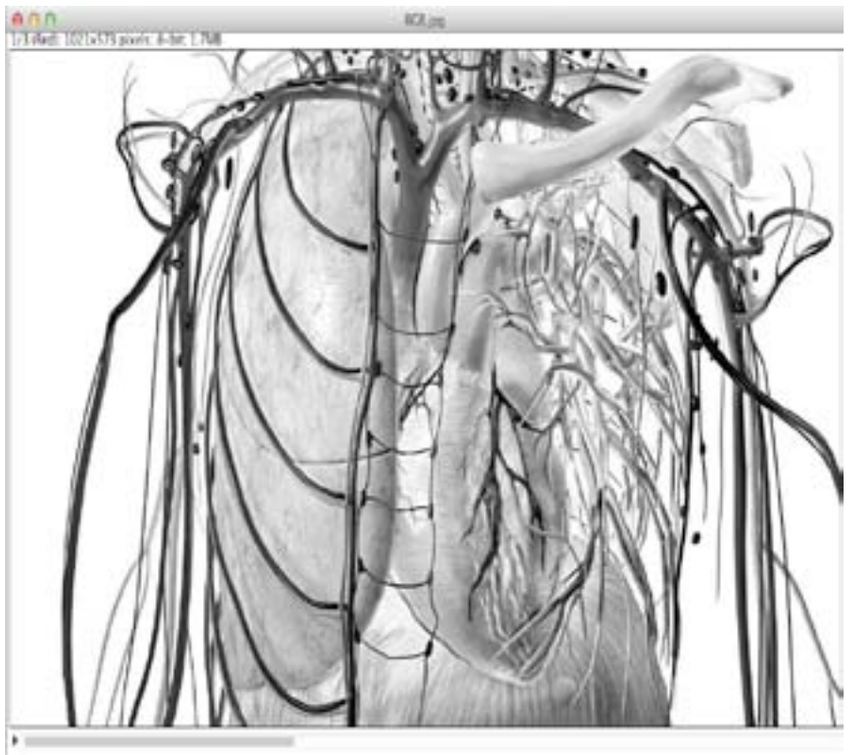
CANAL ALPHA (8 BITS)

16 777 216 CORES (24 BITS)

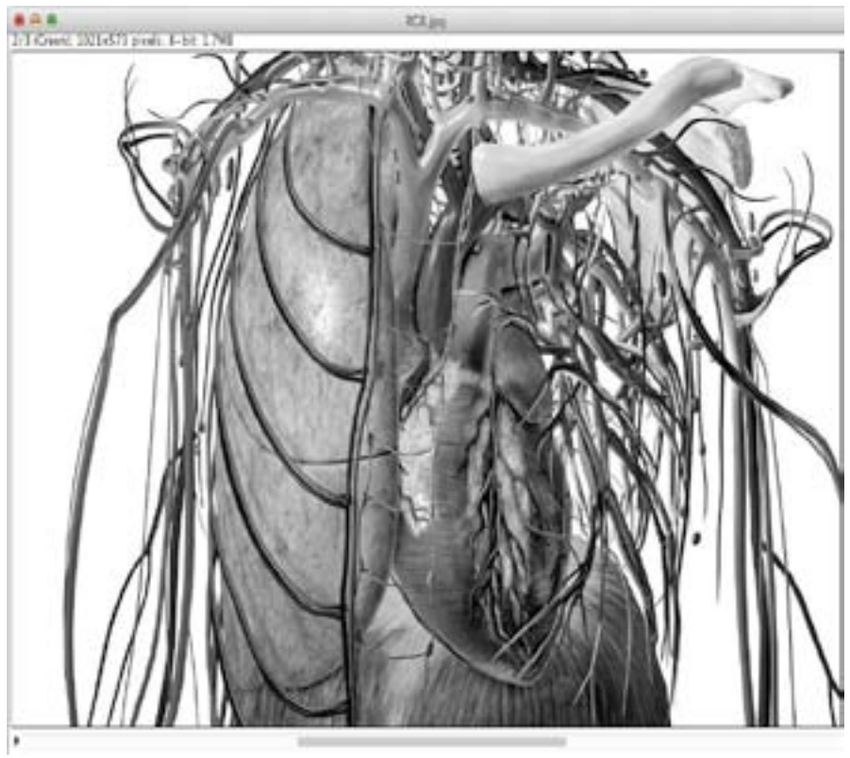
TYPE

RGB Stack

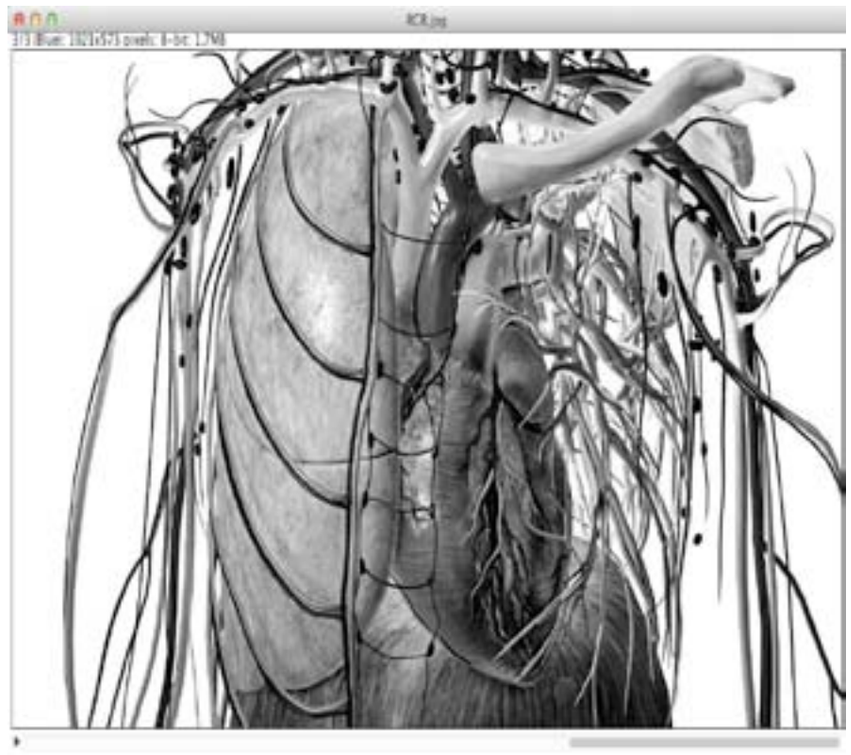
CONVERSÃO NUMA STACK DE 3 SLICES



(1/3) RED



(1/3) GREEN



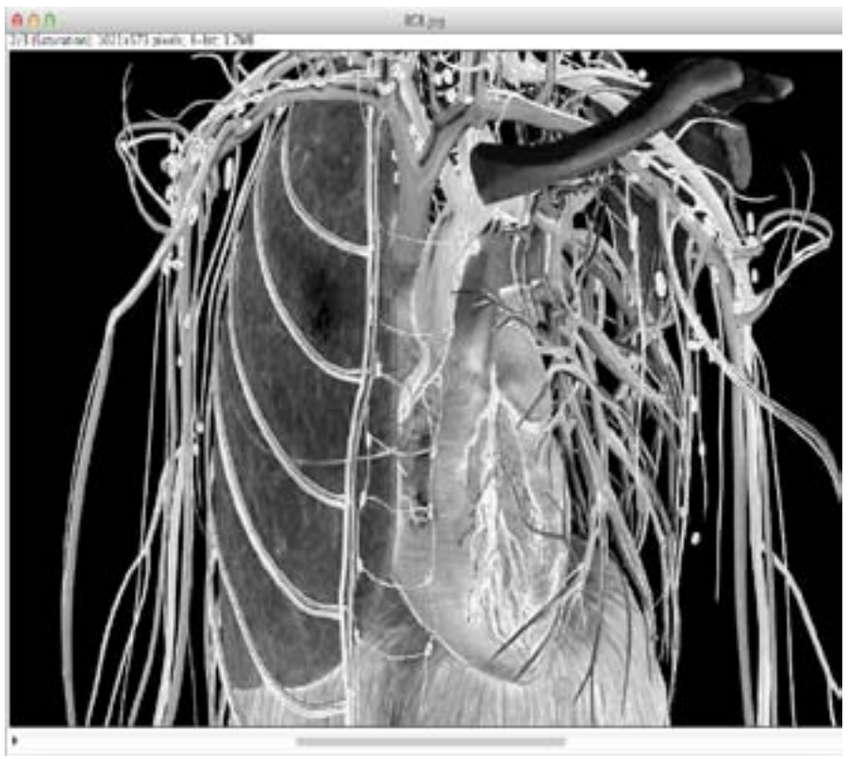
(1/3) BLUE

TYPE

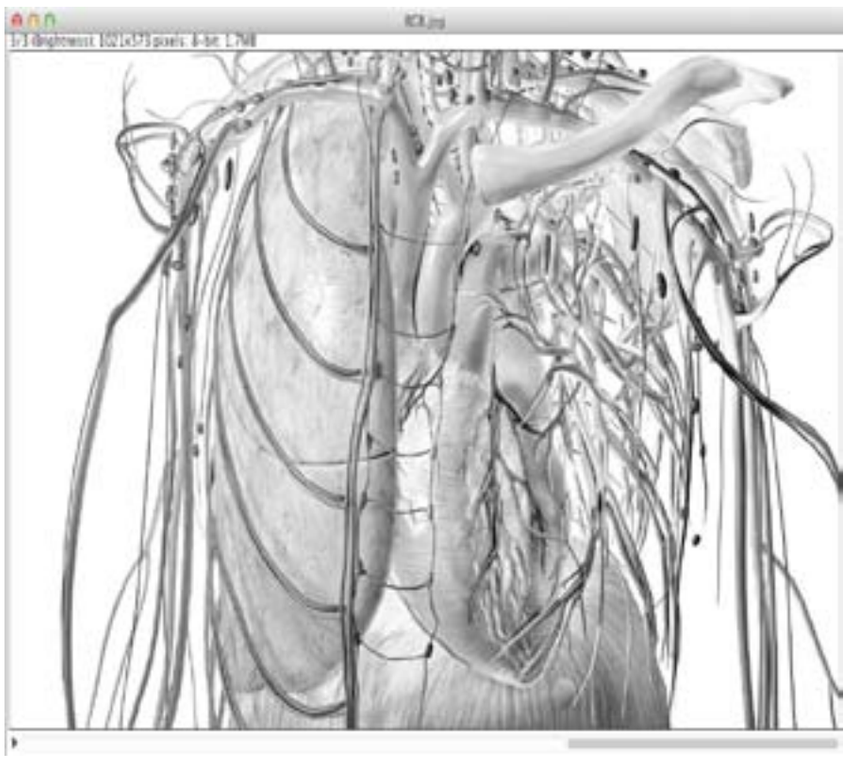
HSB Stack

CONVERSÃO NUMA STACK DE 3 SLICES

(1/3) HUE



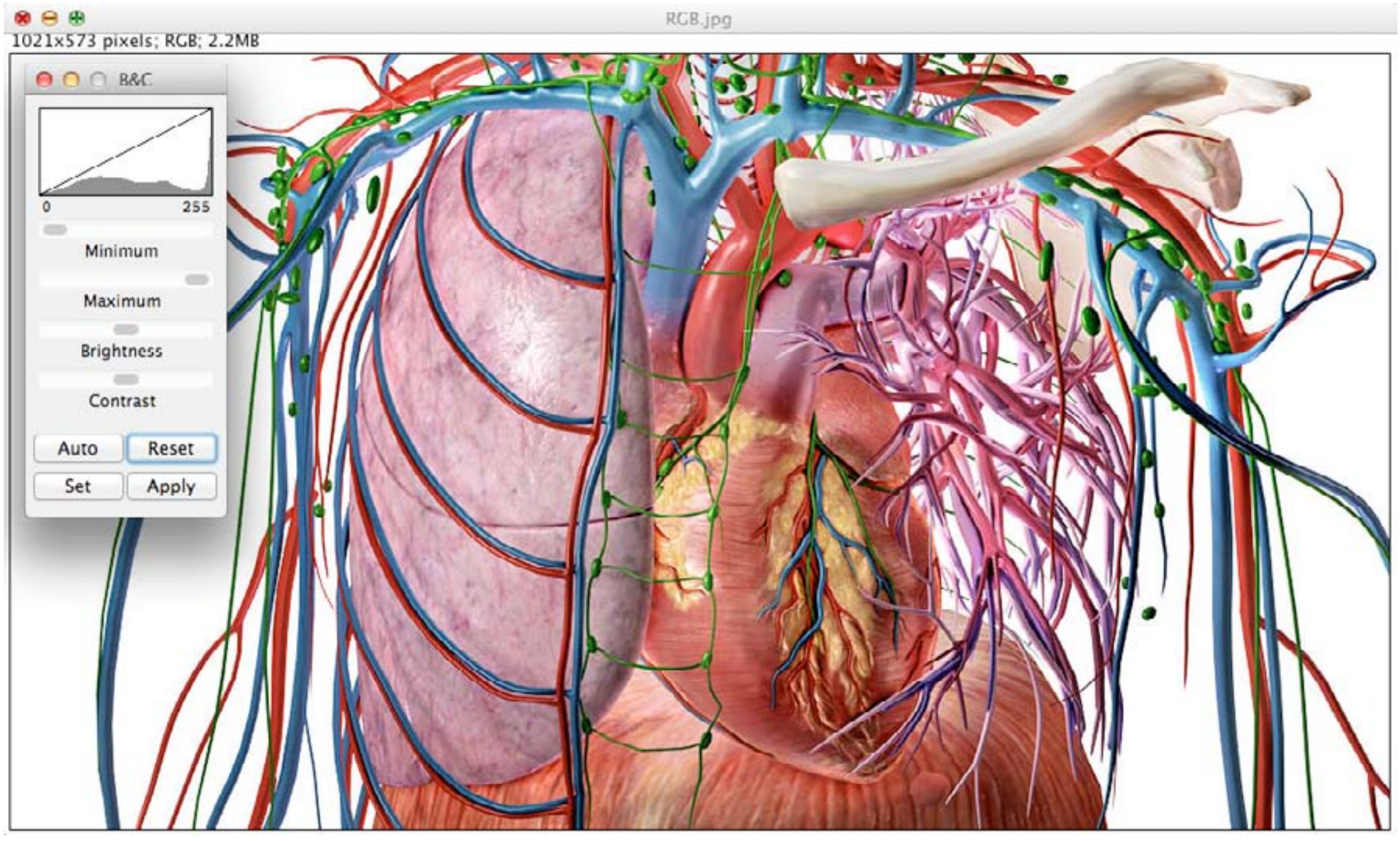
(1/3) SATURATION



(1/3) BRIGHTNESS

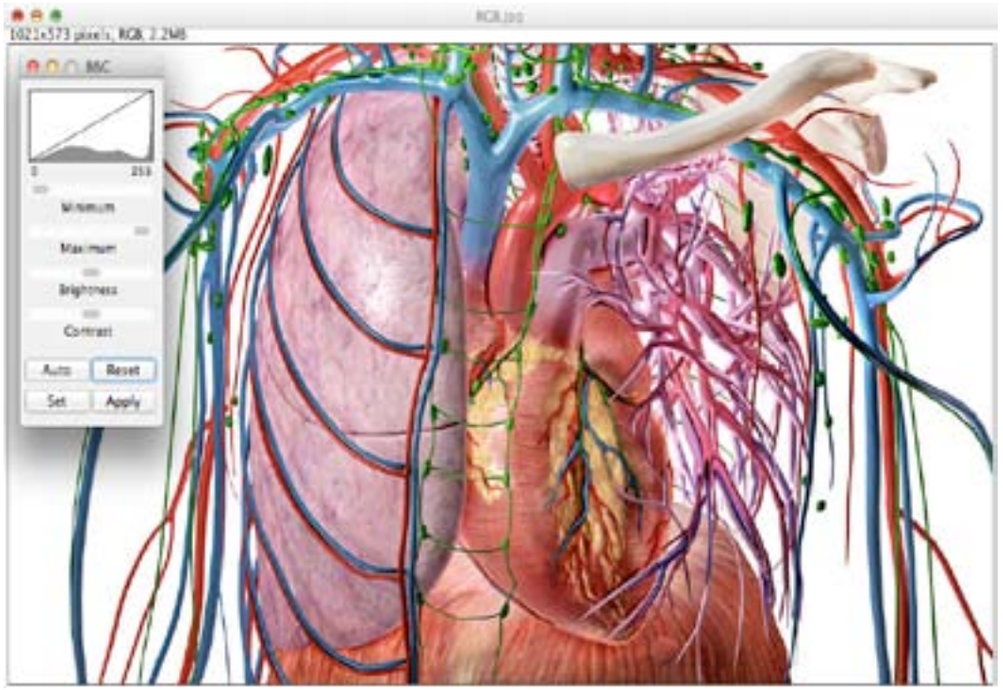
ADJUST

Brightness / Contrast



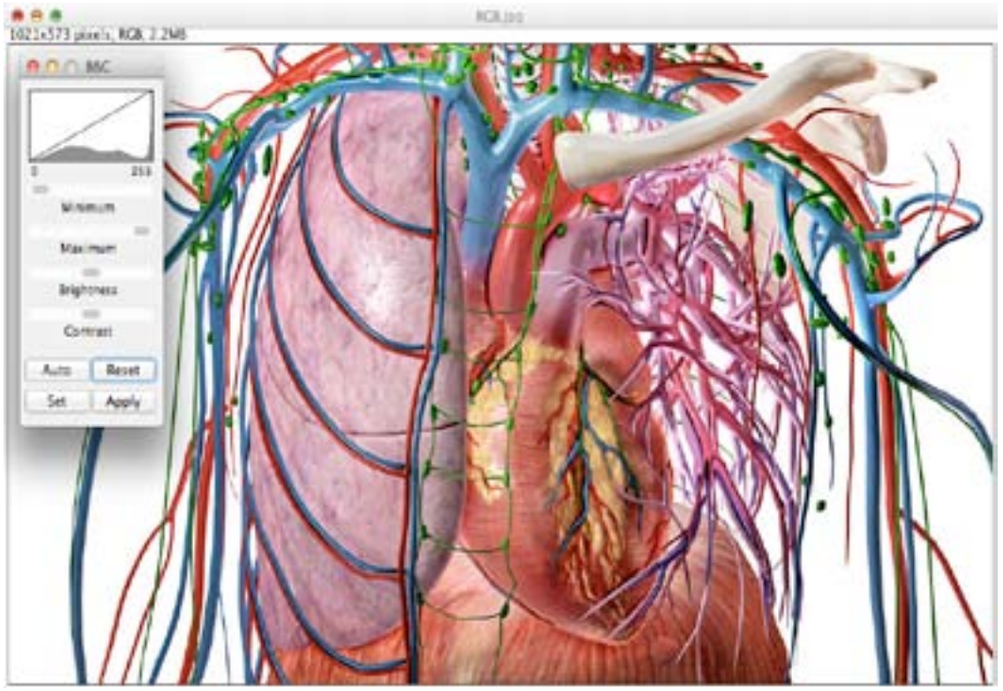
ADJUST

Brightness



ADJUST

Brightness



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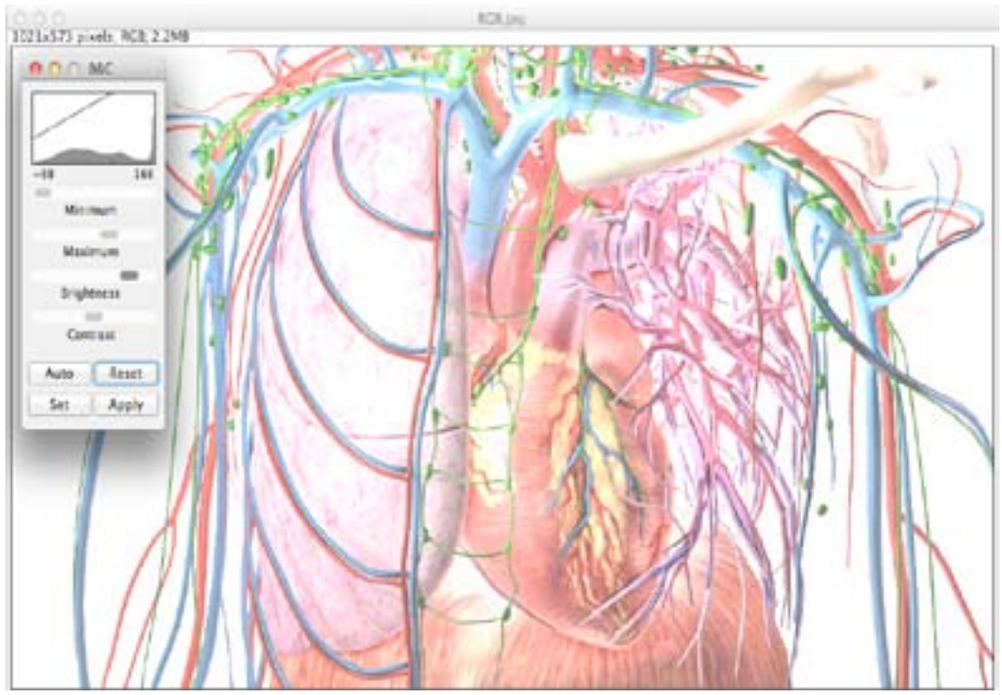
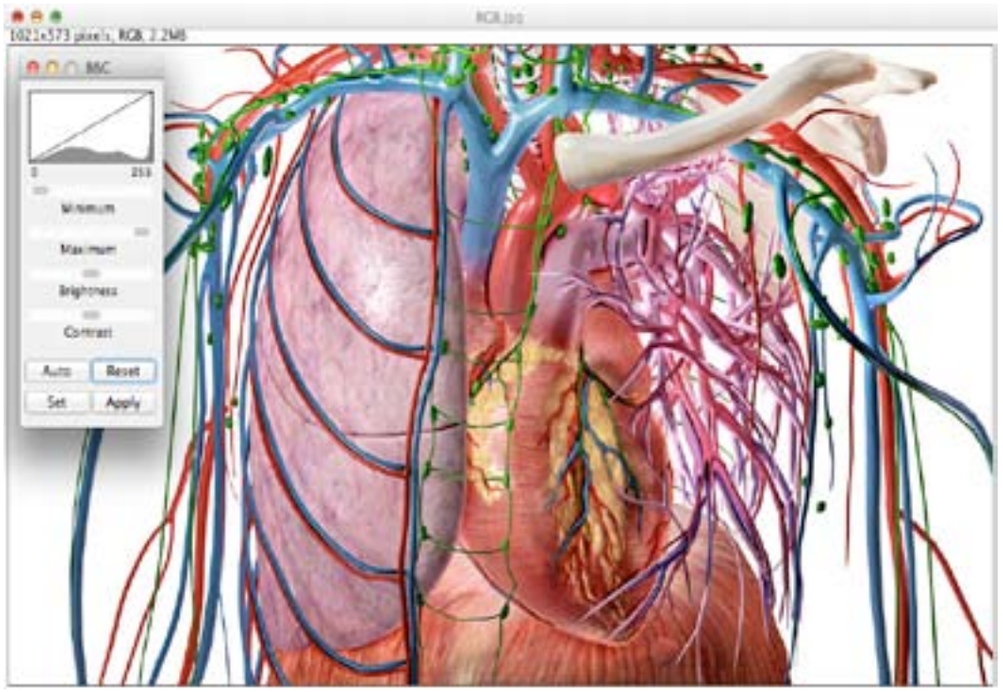


ADJUST

Brightness



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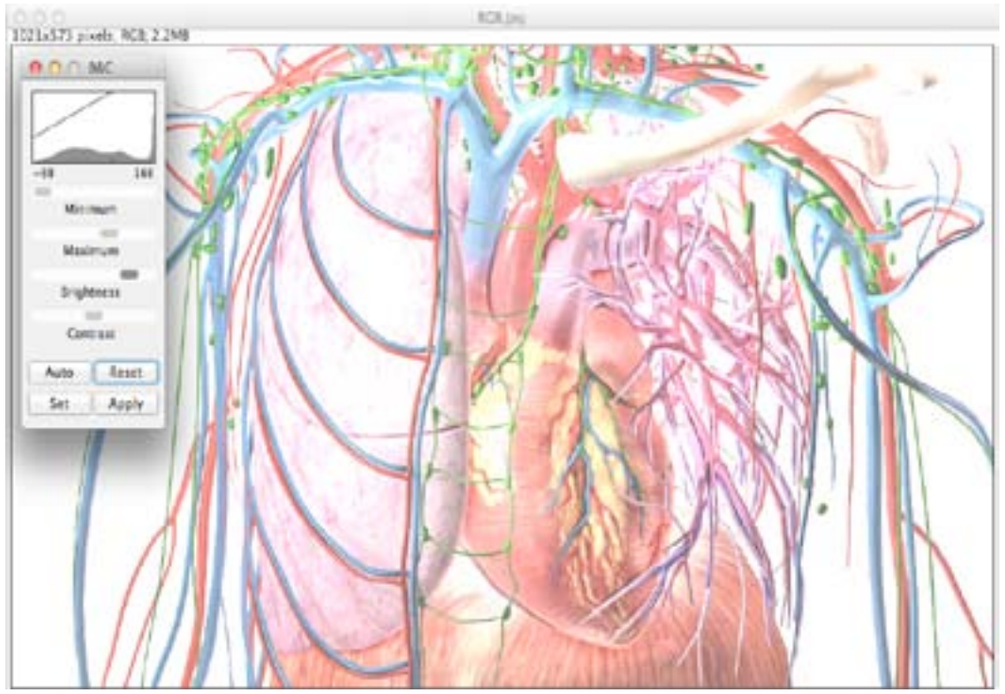

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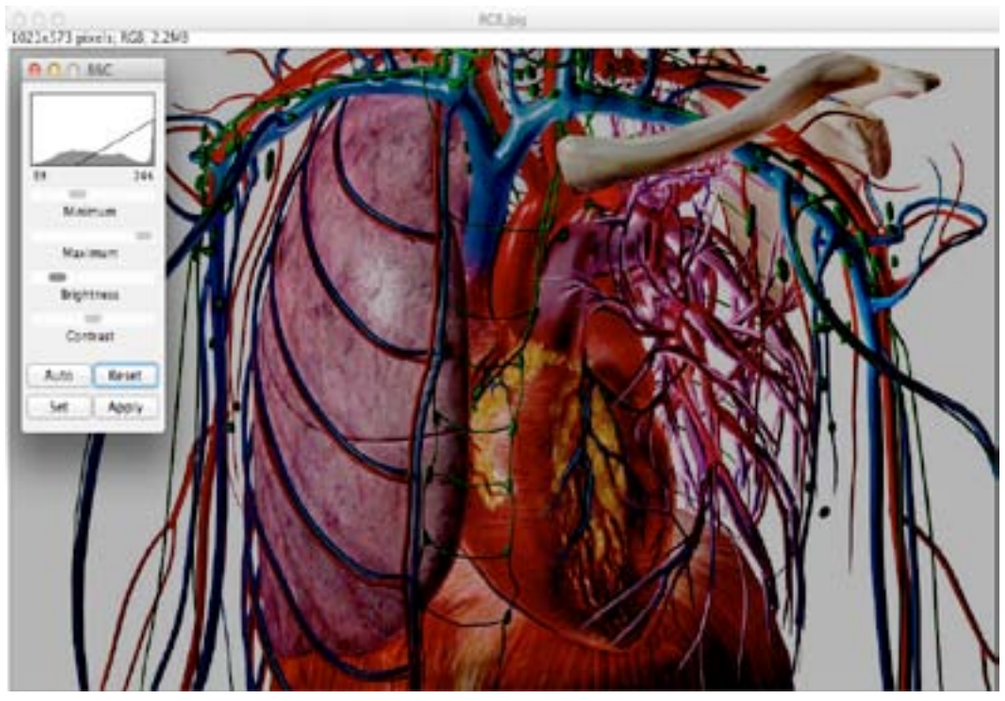
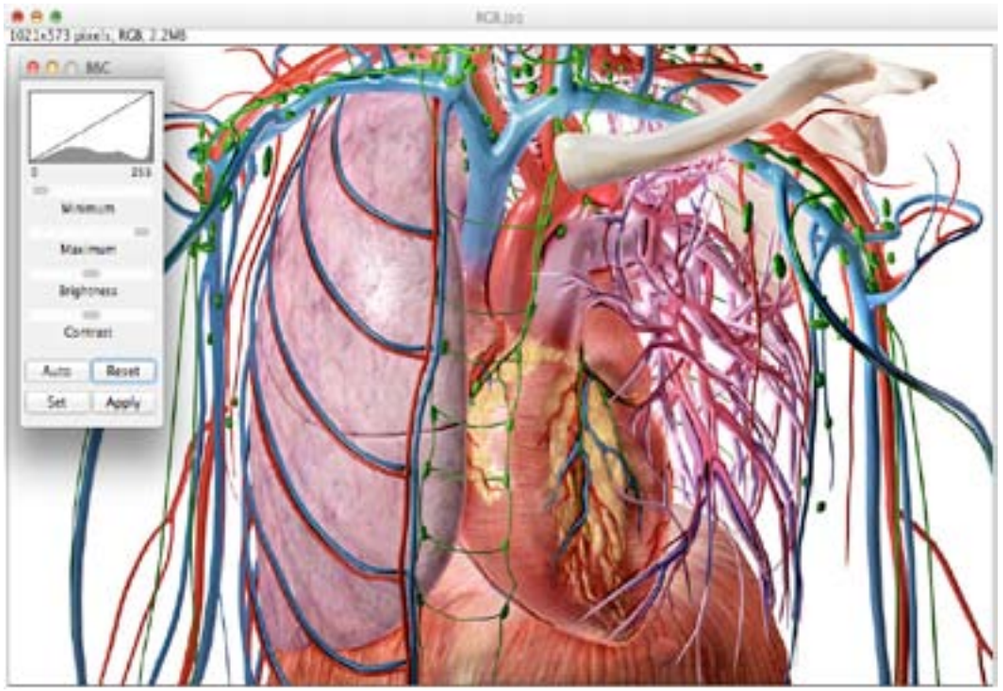


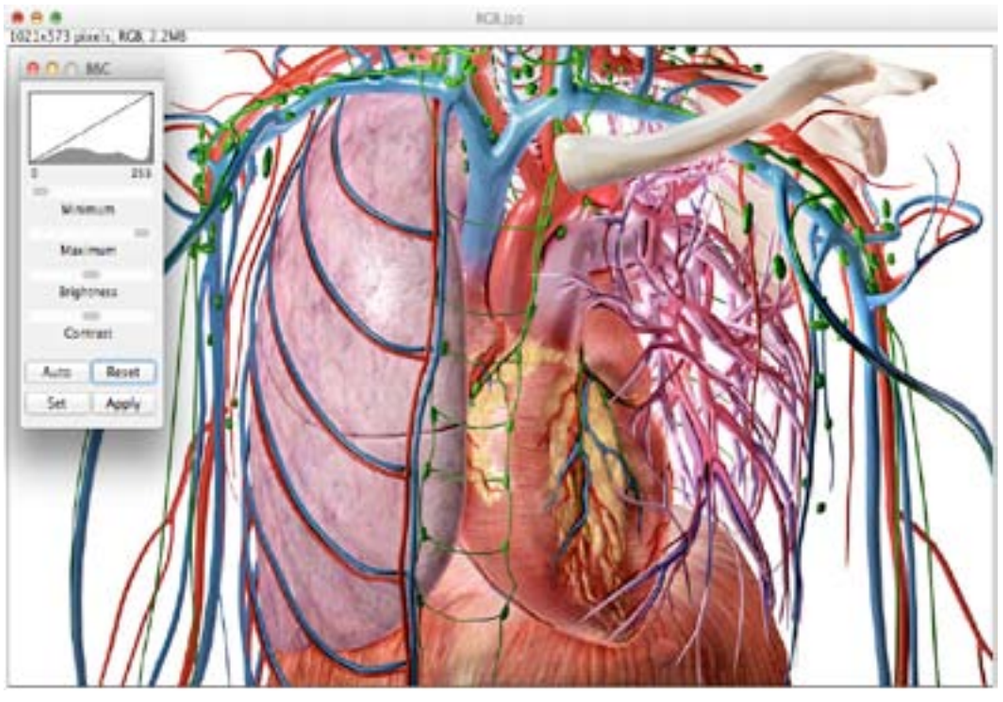
ADJUST

Contrast



ADJUST

Contrast



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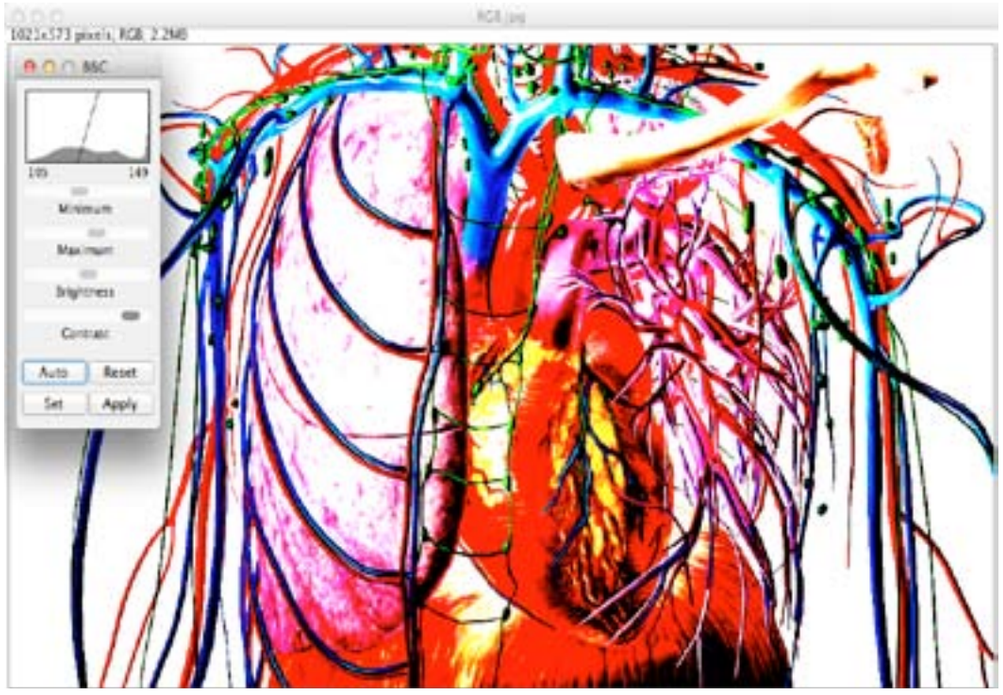
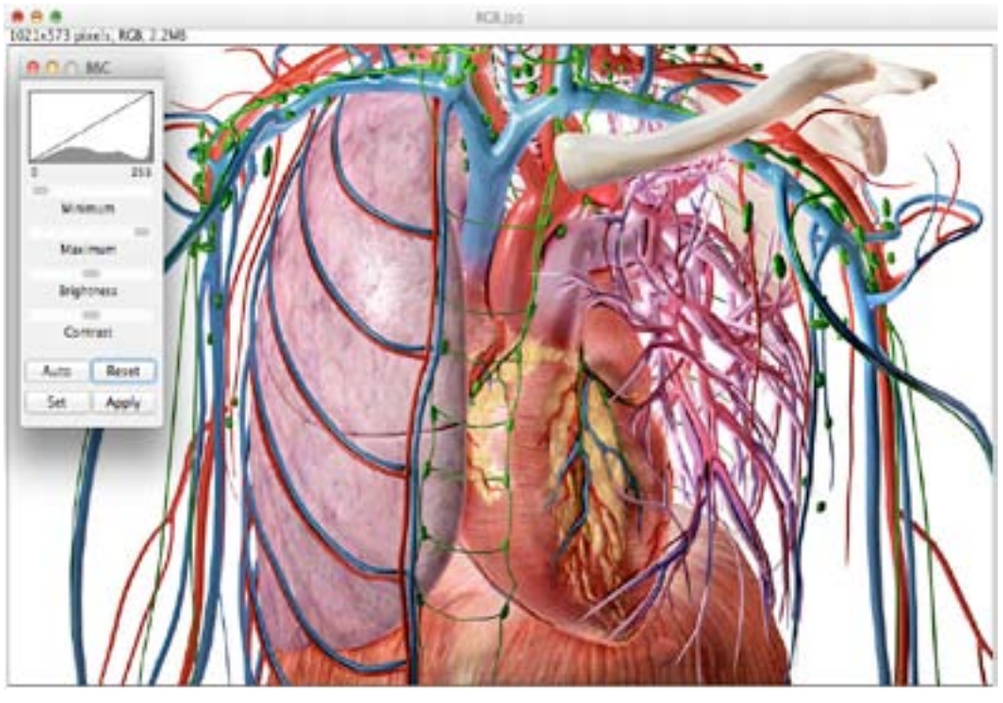


ADJUST

Contrast

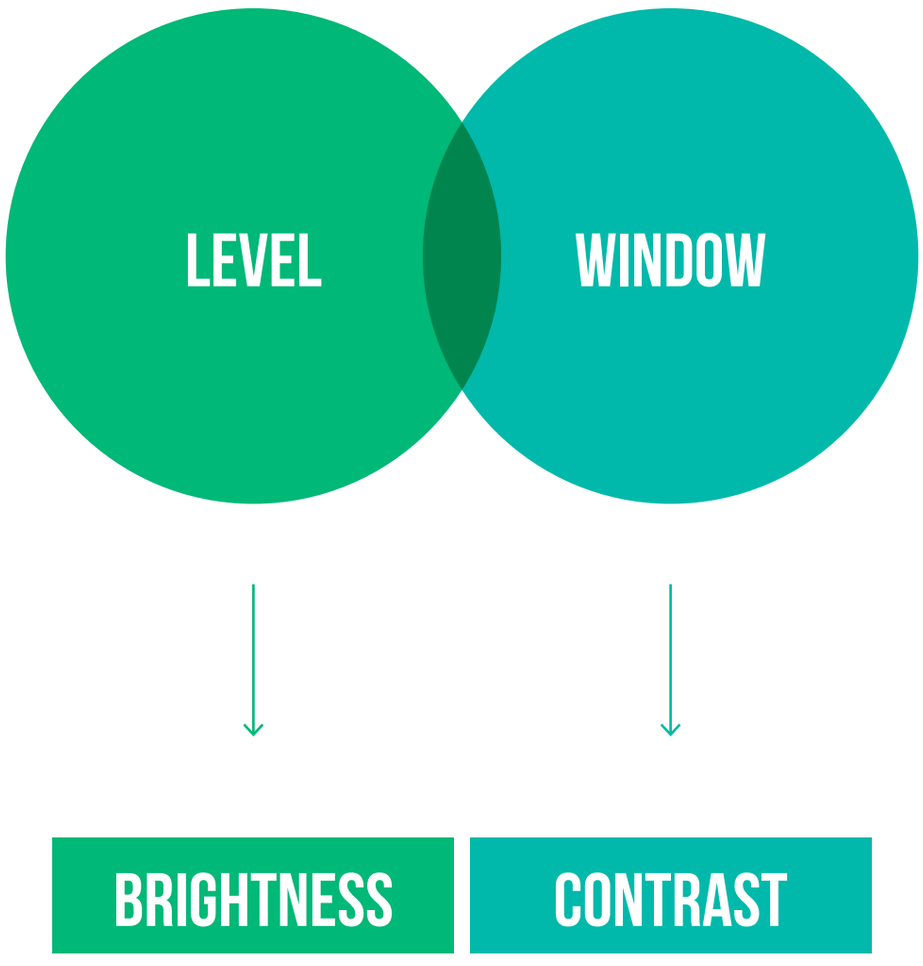


+

-

ADJUST

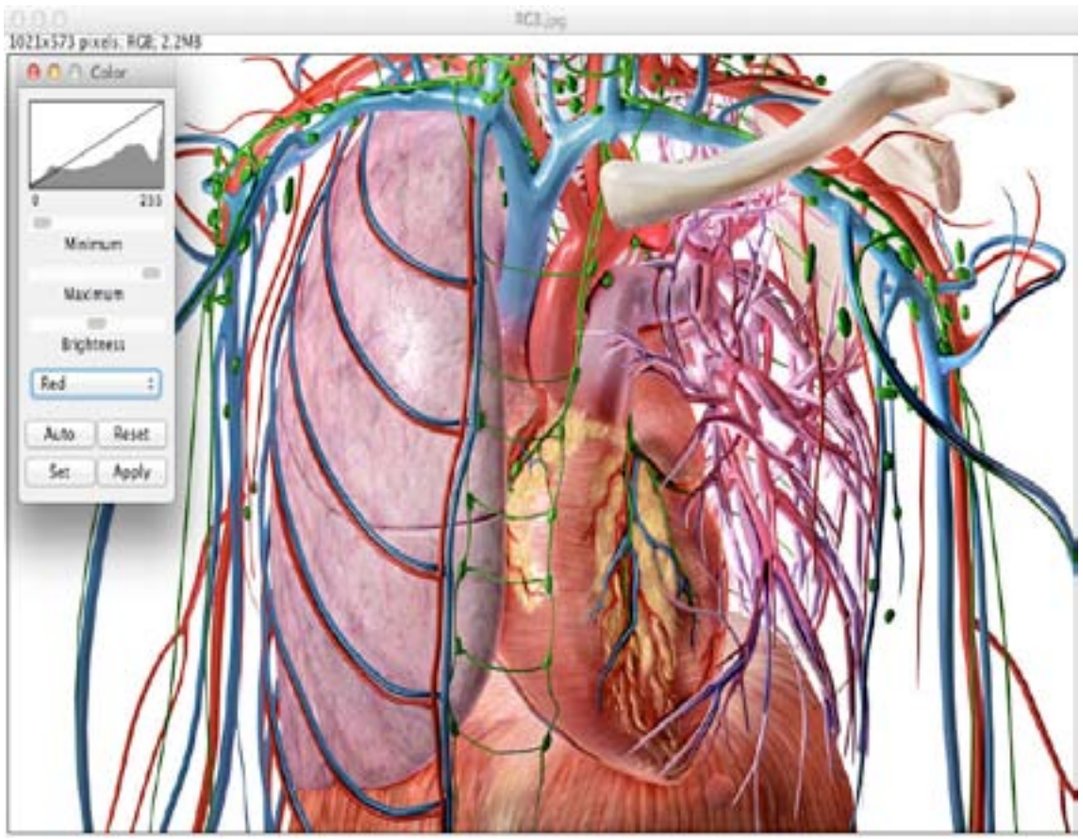
Window / Level

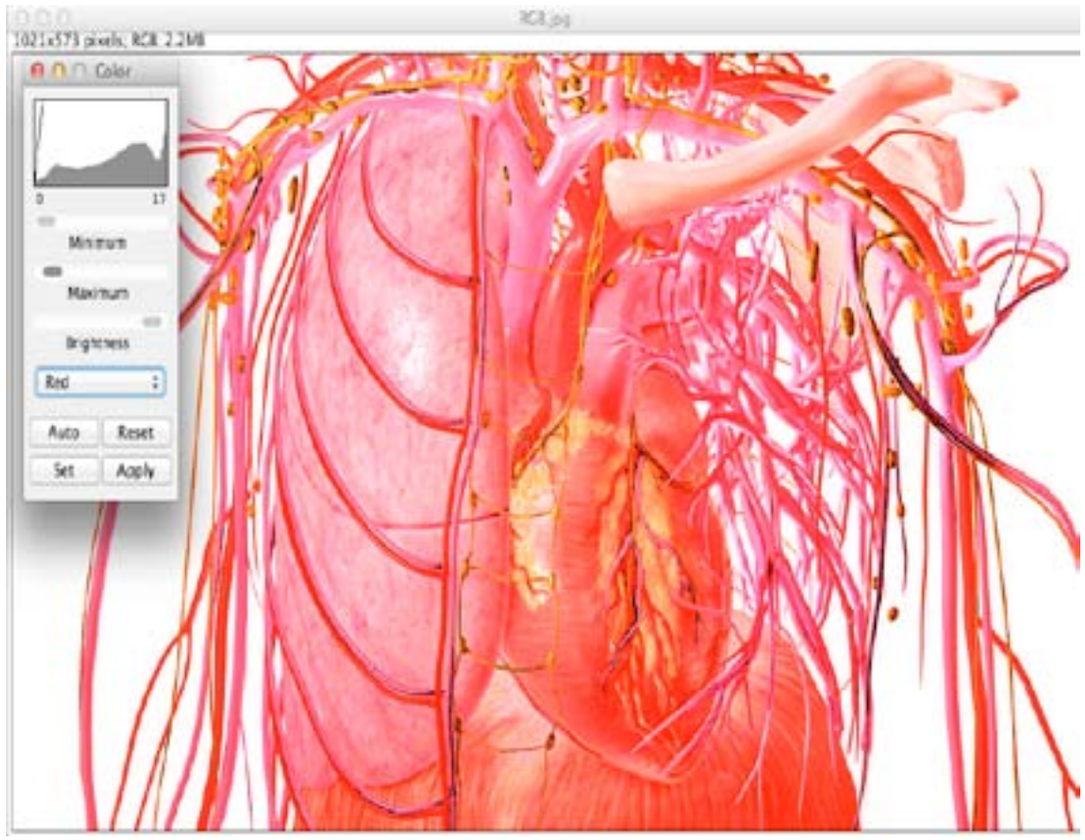


ADJUST

Color Balance

AJUSTE DO BRILHO E CONTRASTE A UMA COR RGB

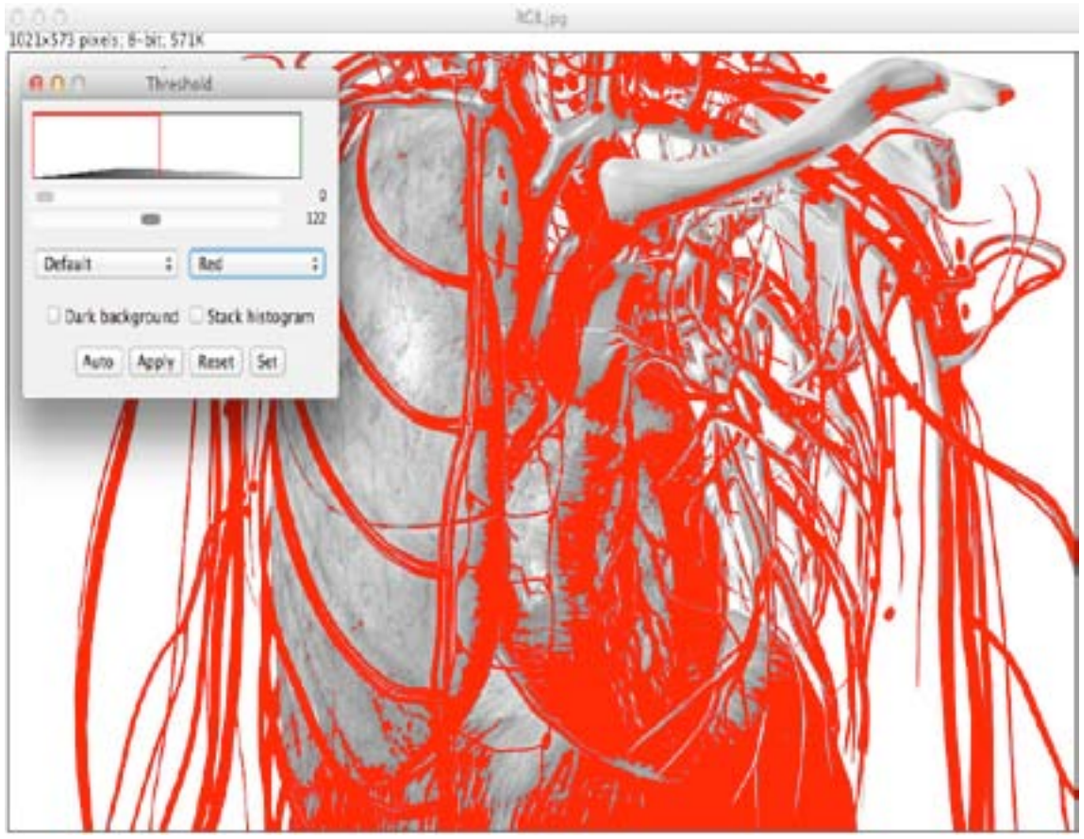


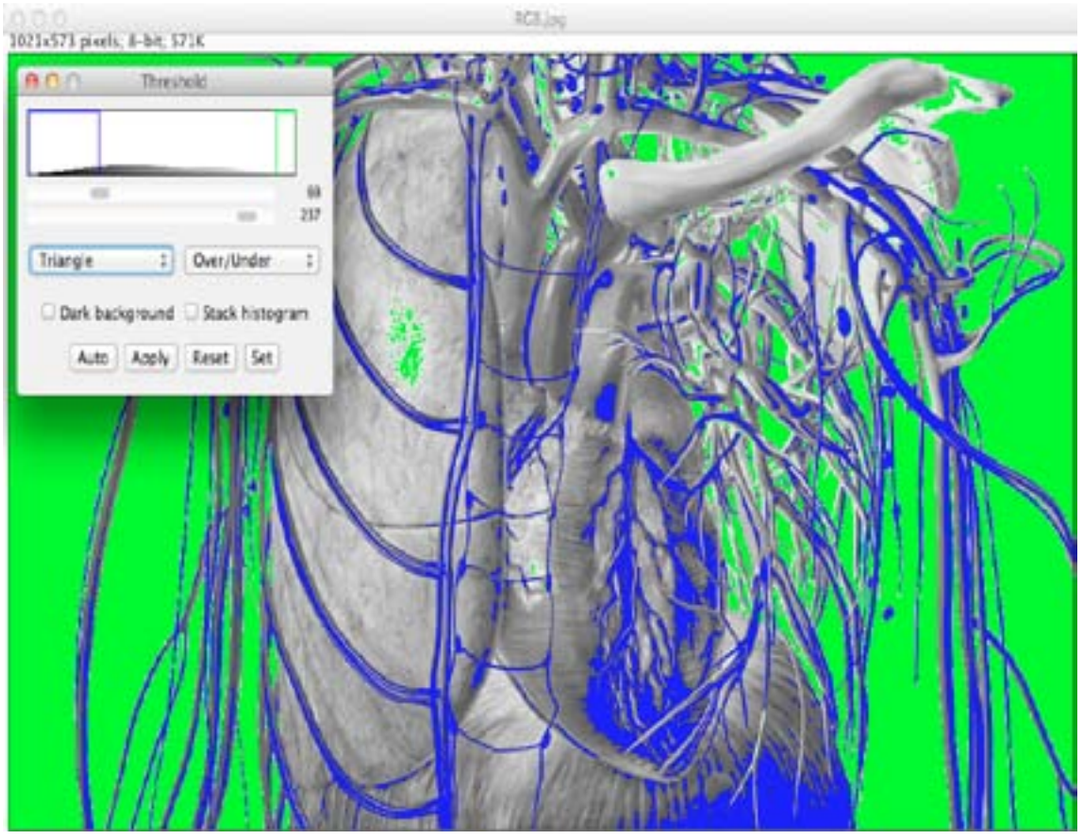


ADJUST

Threshold

VALORES SUPERIORES E INFERIORES DE THRESHOLD

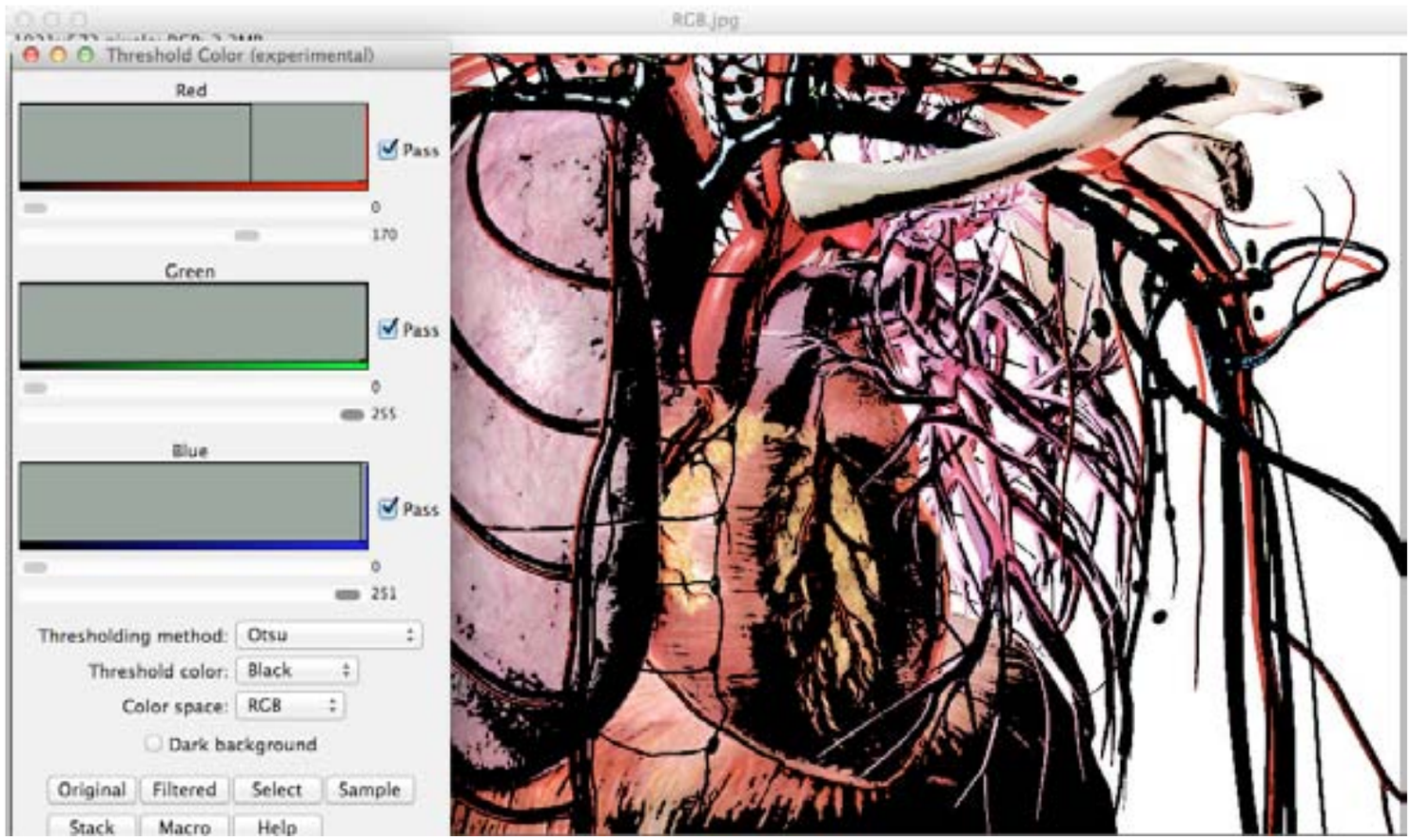




ADJUST

Color Threshold (Experimental)

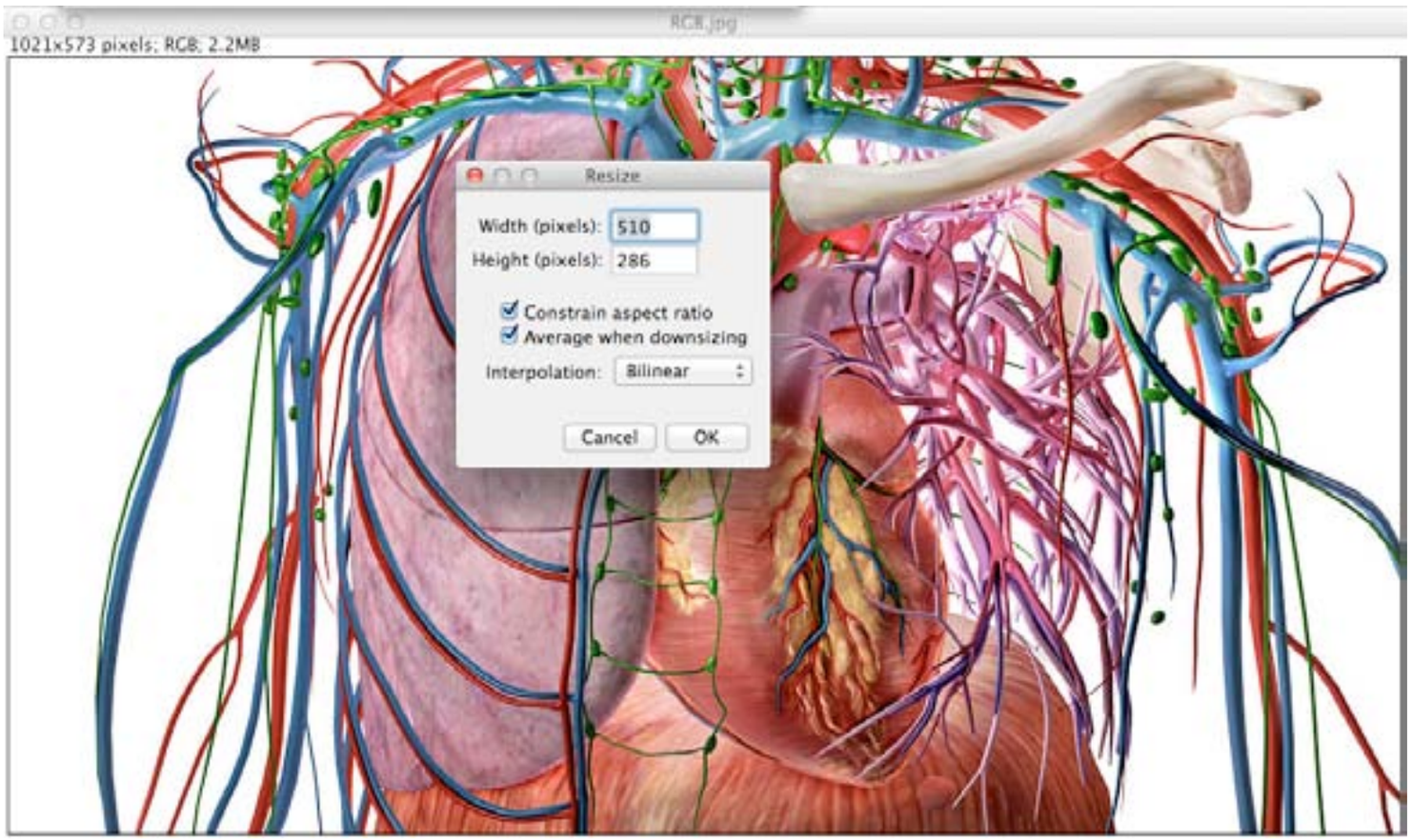
THRESHOLD EM IMAGENS RGB



- HSB
- RGB
- CIE LAB
- YUV

ADJUST

Size

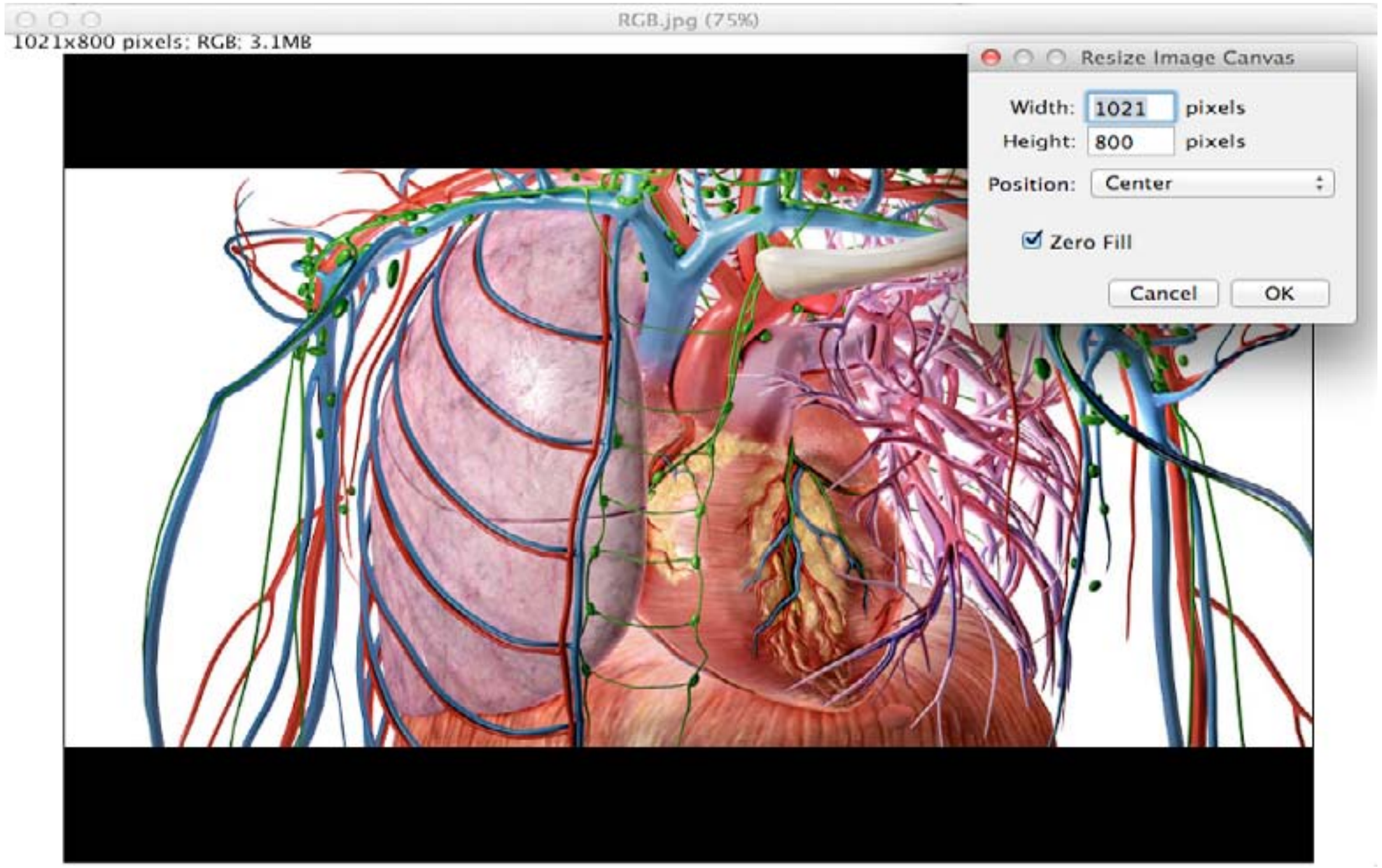


INTERPOLAÇÃO BILINEAR

INTERPOLAÇÃO BICÚBICA

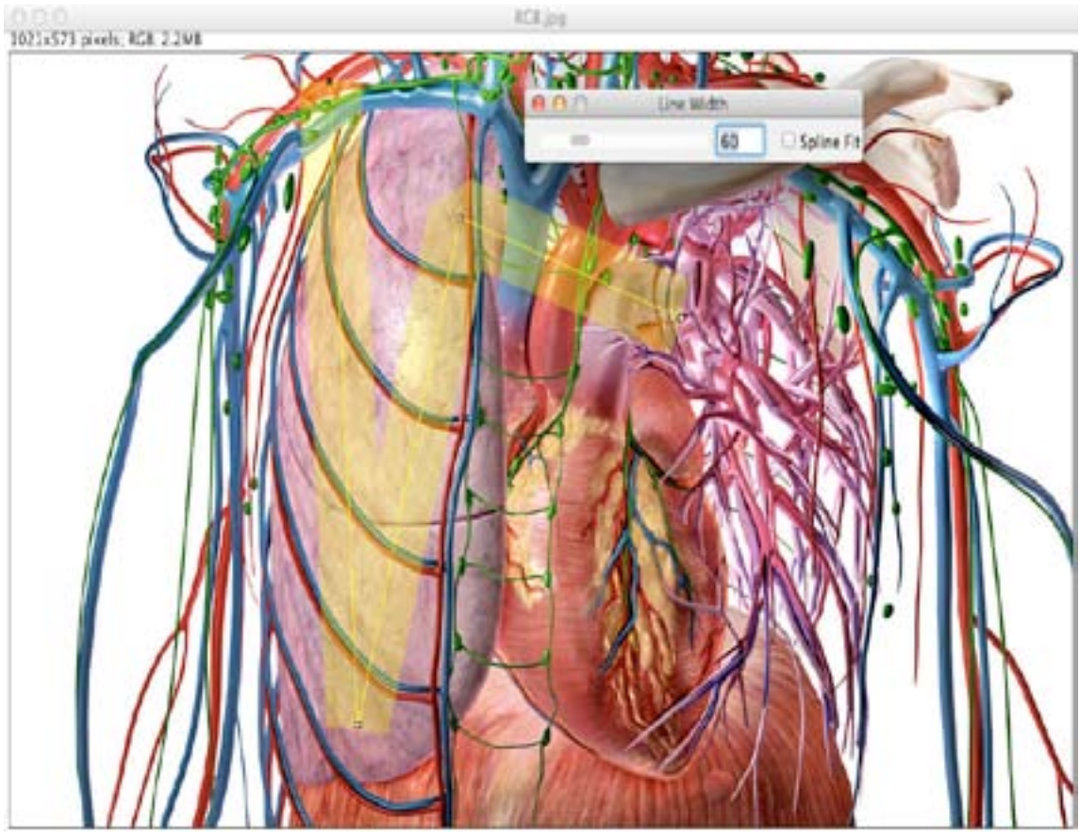
ADJUST

Canvas Size



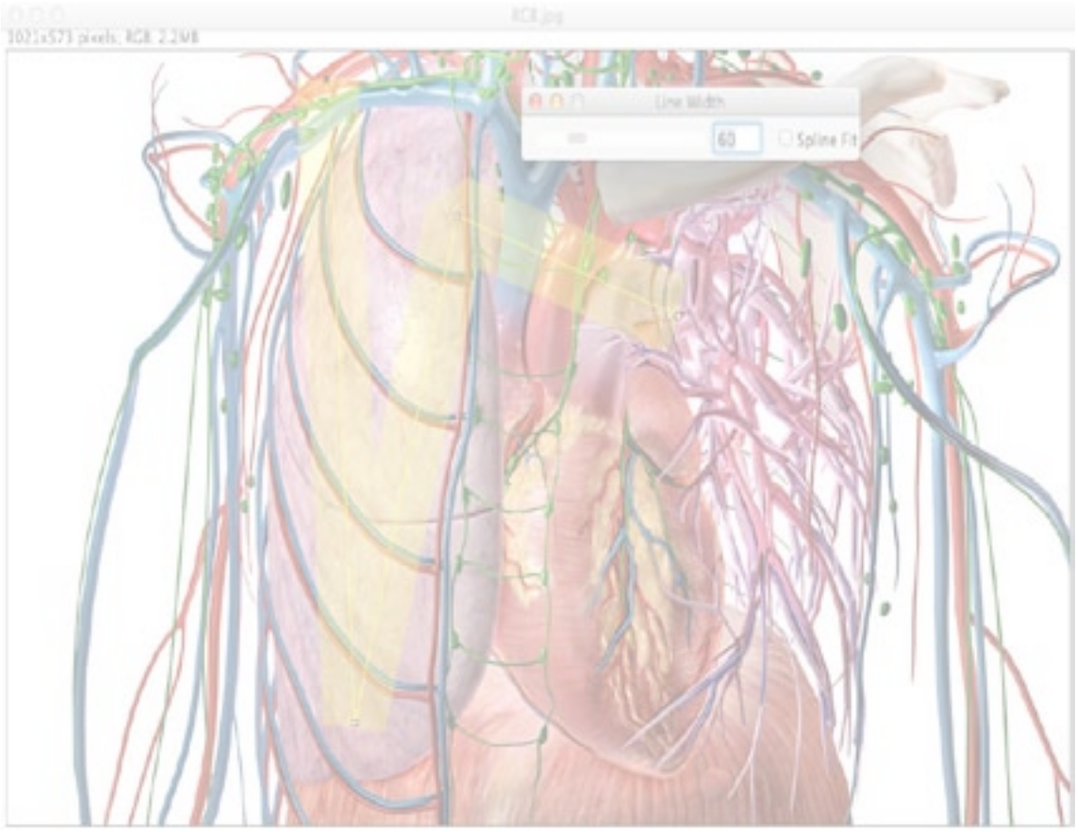
ADJUST

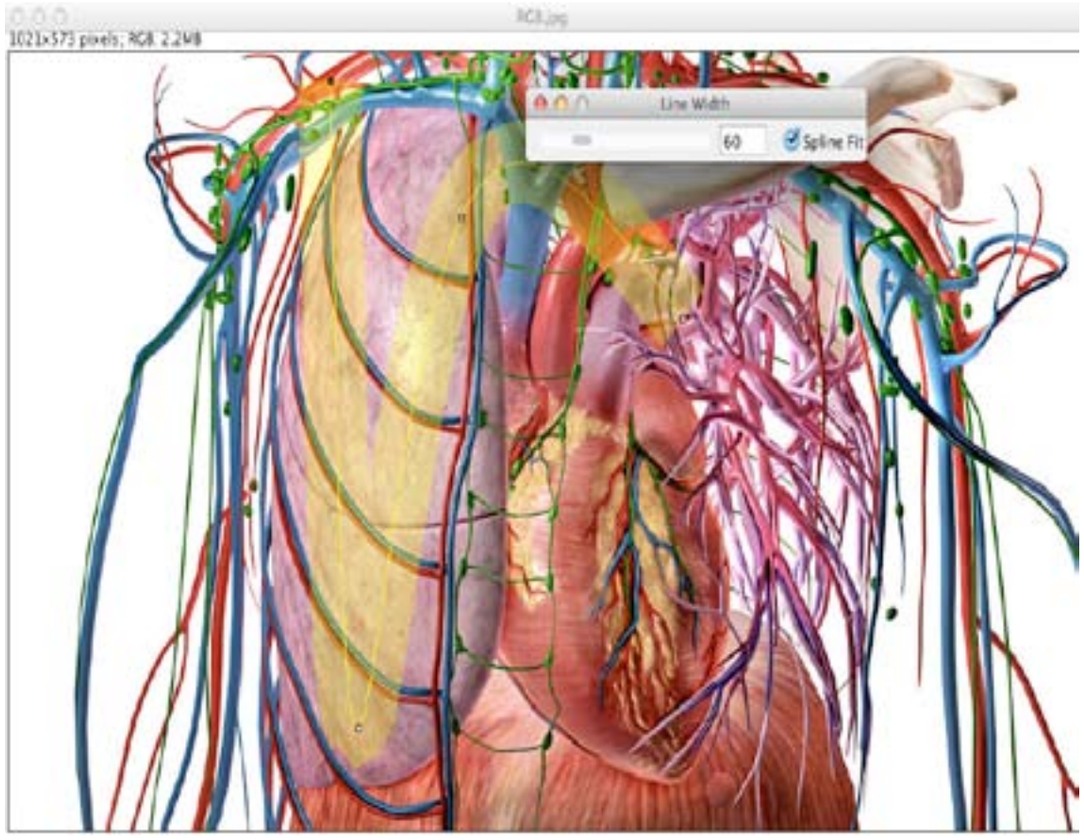
Line Width



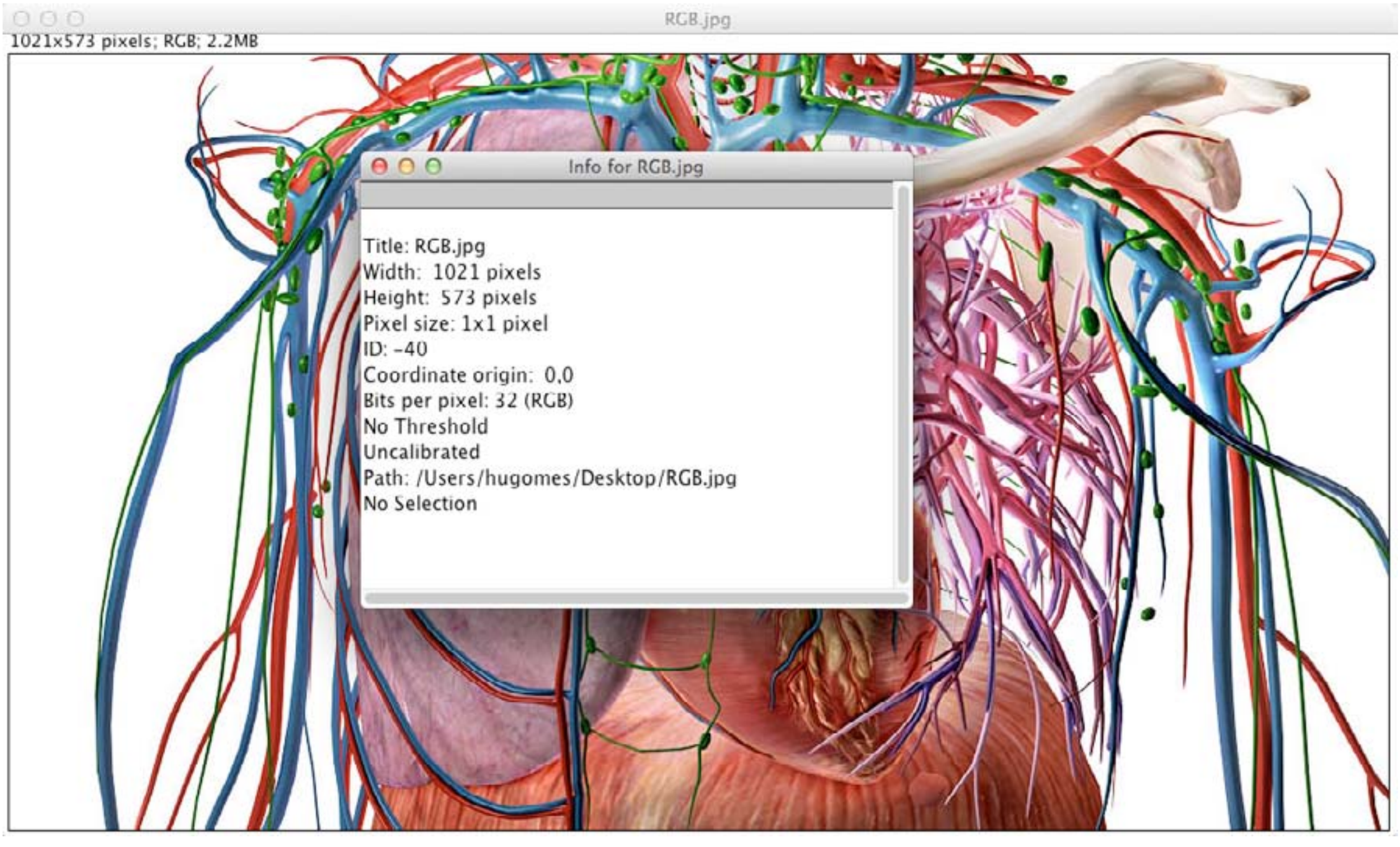
ADJUST

Line Width

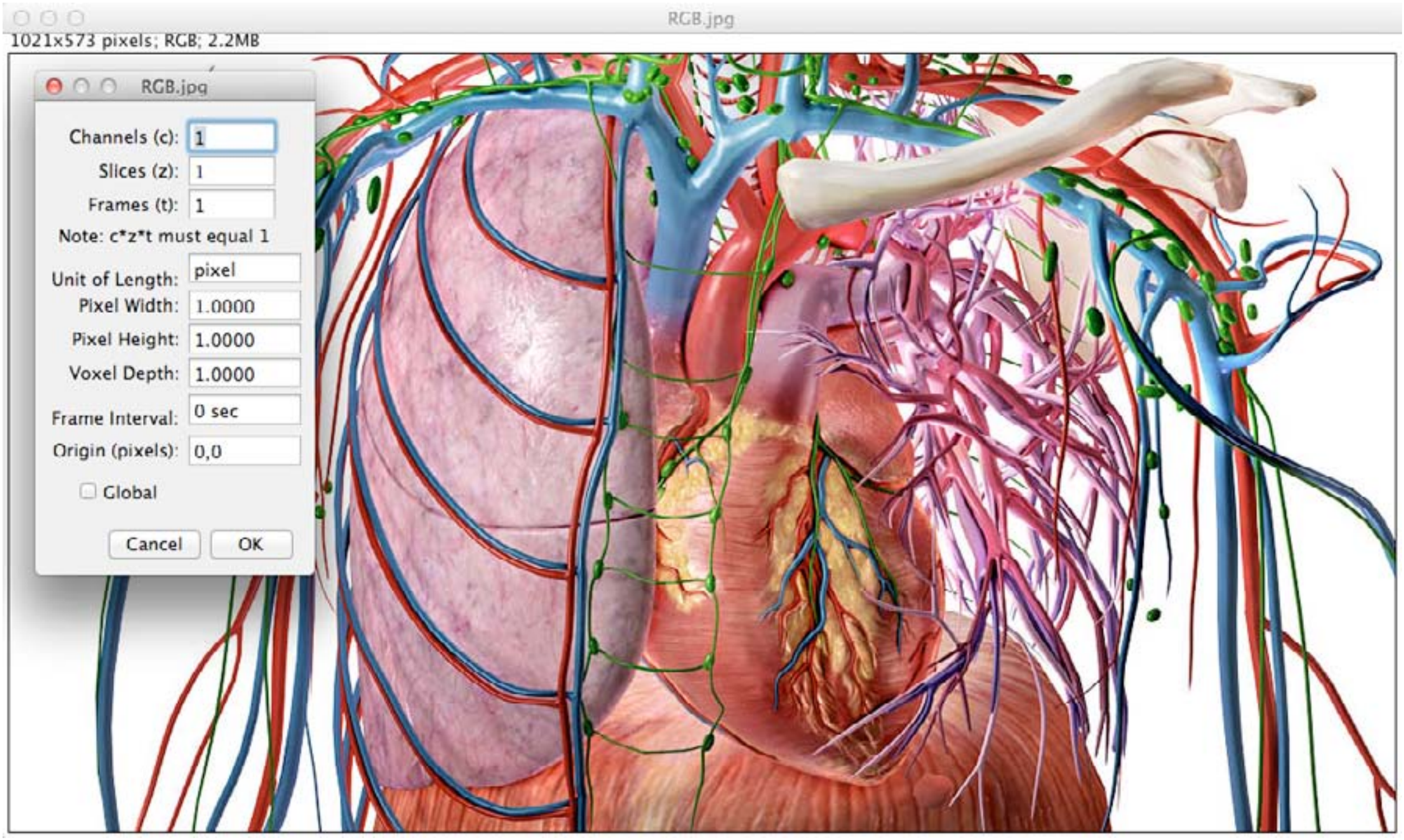




SHOW INFO

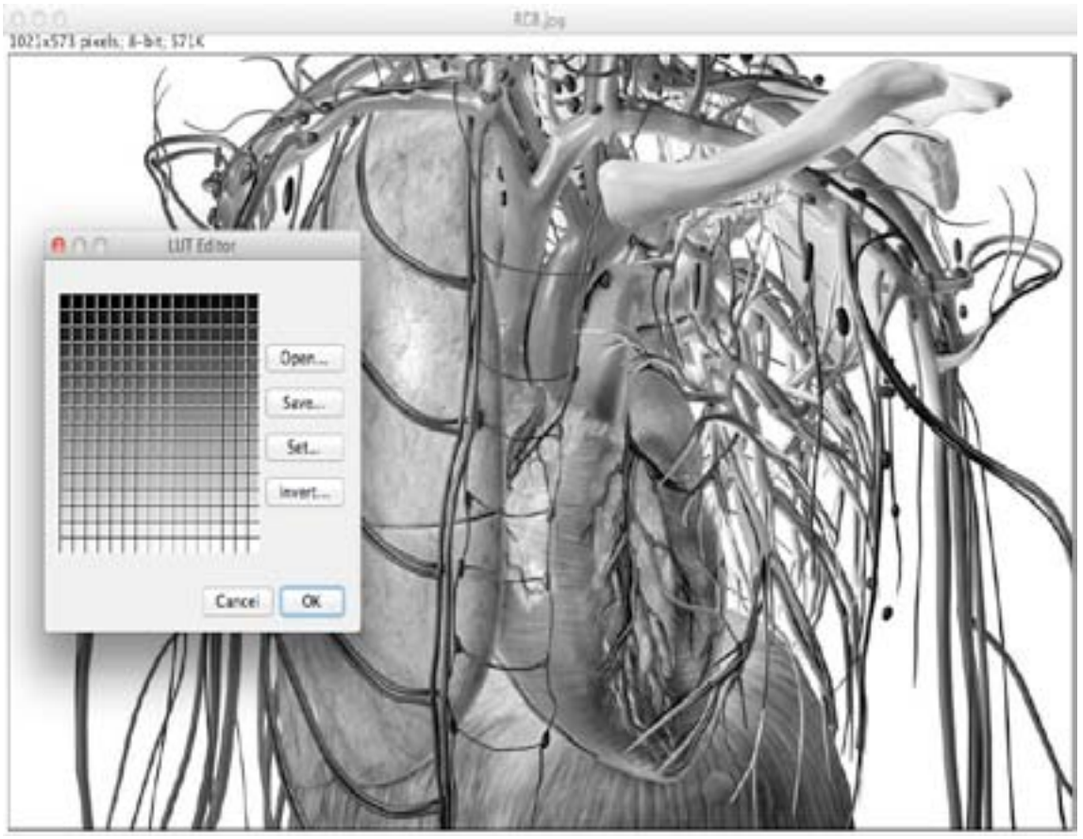

RGB.jpg
1021x573 pixels; RGB; 2.2MB
Info for RGB.jpg
Title: RGB.jpg
Width: 1021 pixels
Height: 573 pixels
Pixel size: 1x1 pixel
ID: -40
Coordinate origin: 0,0
Bits per pixel: 32 (RGB)
No Threshold
Uncalibrated
Path: /Users/hugomes/Desktop/RGB.jpg
No Selection

PROPERTIES

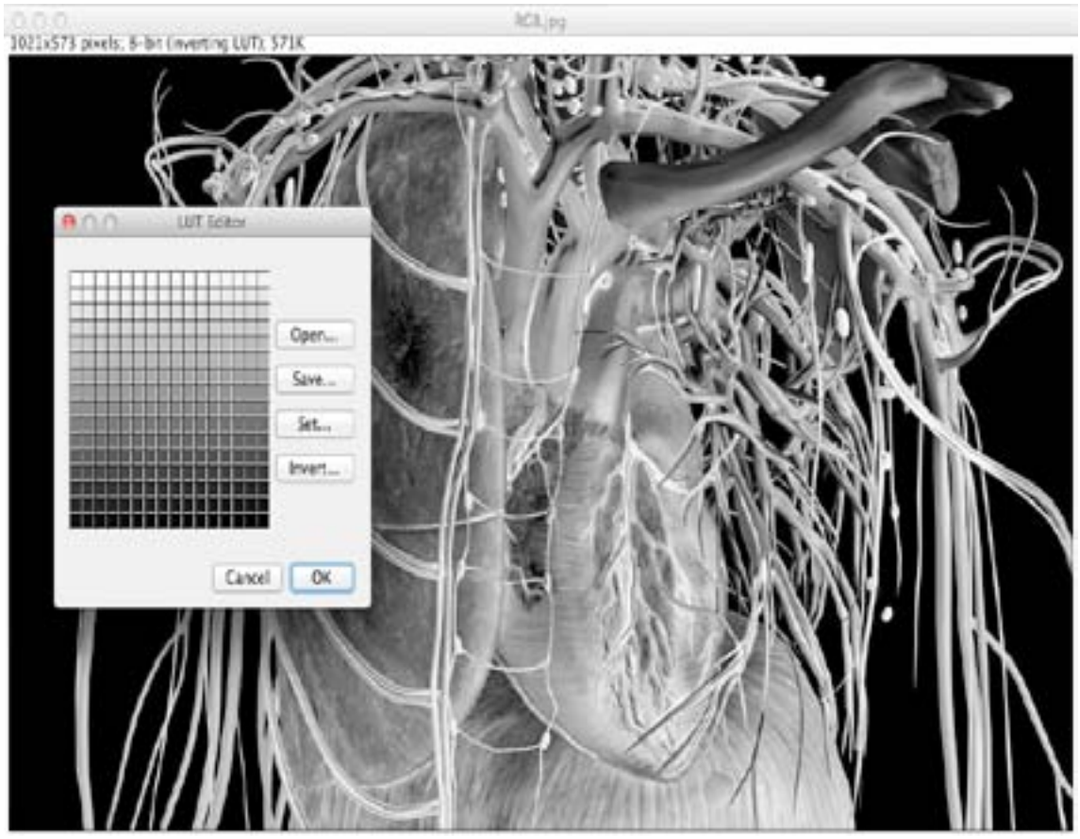

RGB.jpg
1021x573 pixels; RGB; 2.2MB
RGB.jpg
Channels (c): 1
Slices (z): 1
Frames (t): 1
Note: c*z*t must equal 1
Unit of Length: pixel
Pixel Width: 1.0000
Pixel Height: 1.0000
Voxel Depth: 1.0000
Frame Interval: 0 sec
Origin (pixels): 0,0
Global
Cancel
OK

LOOKUP TABLES (LUT)

Invert LUT



(V)

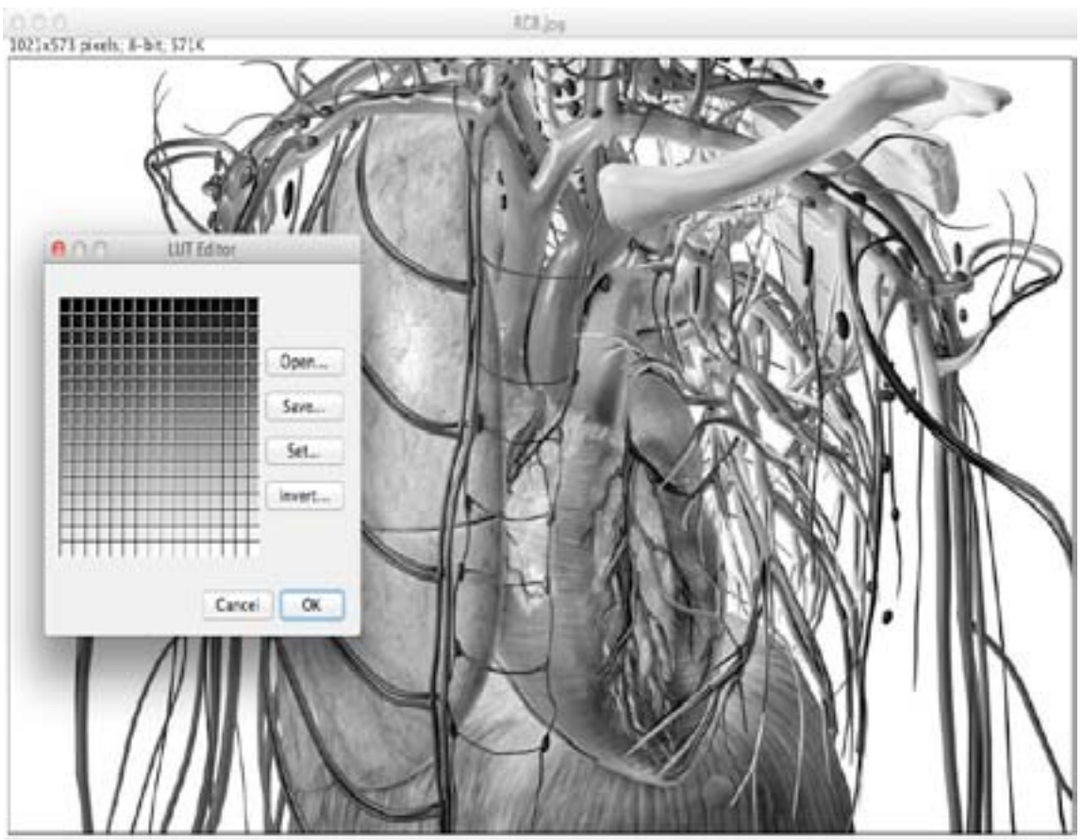


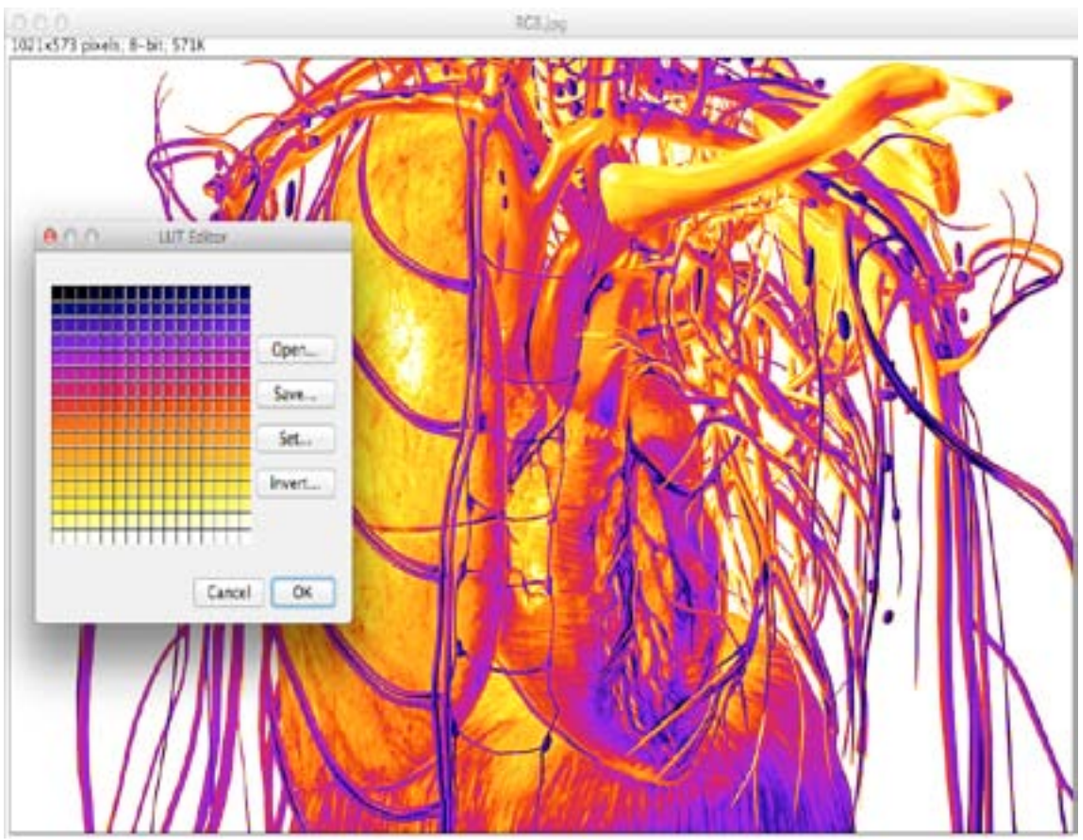
255-(V)

LOOKUP TABLES (LUT)

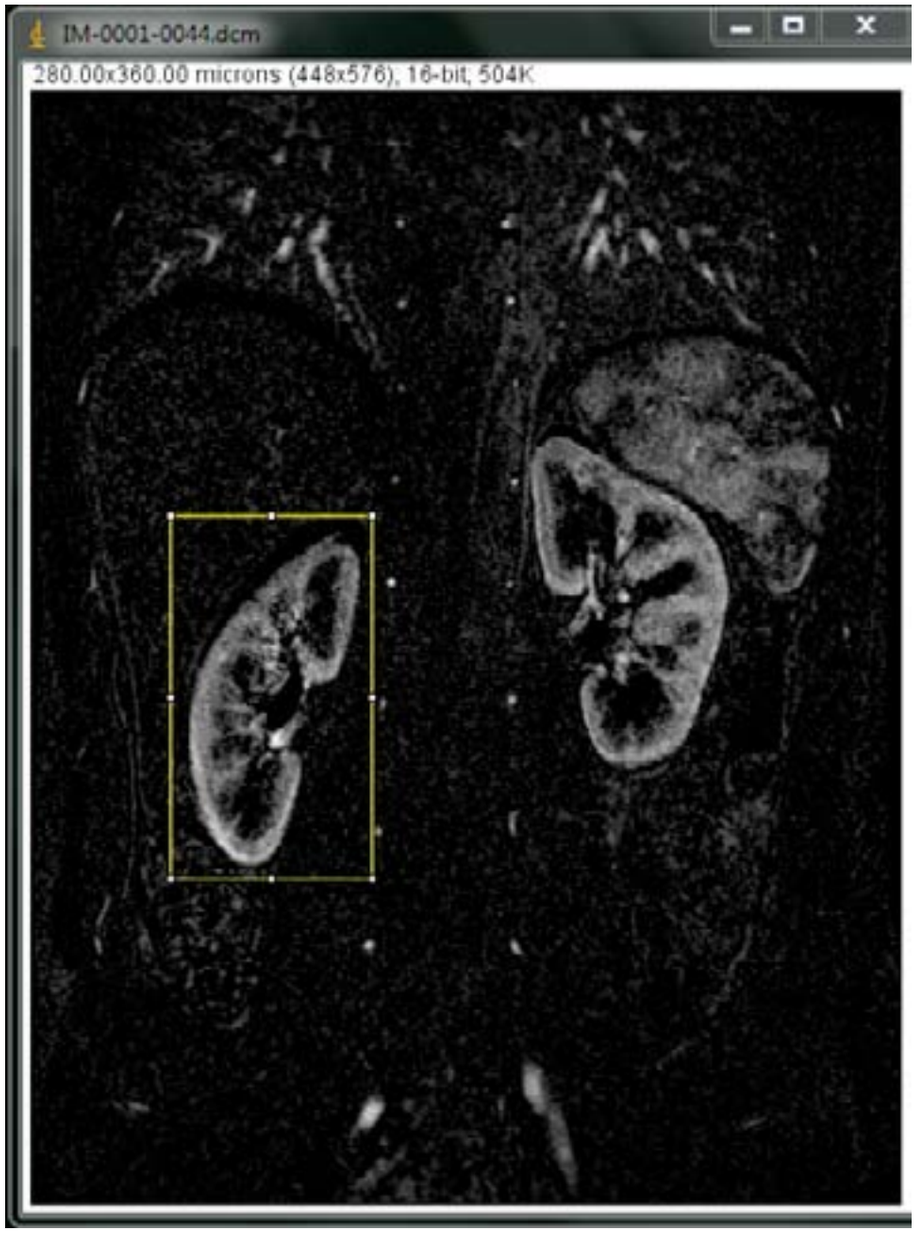
Apply LUT

APLICA A LUT ACTUAL A CADA PIXEL

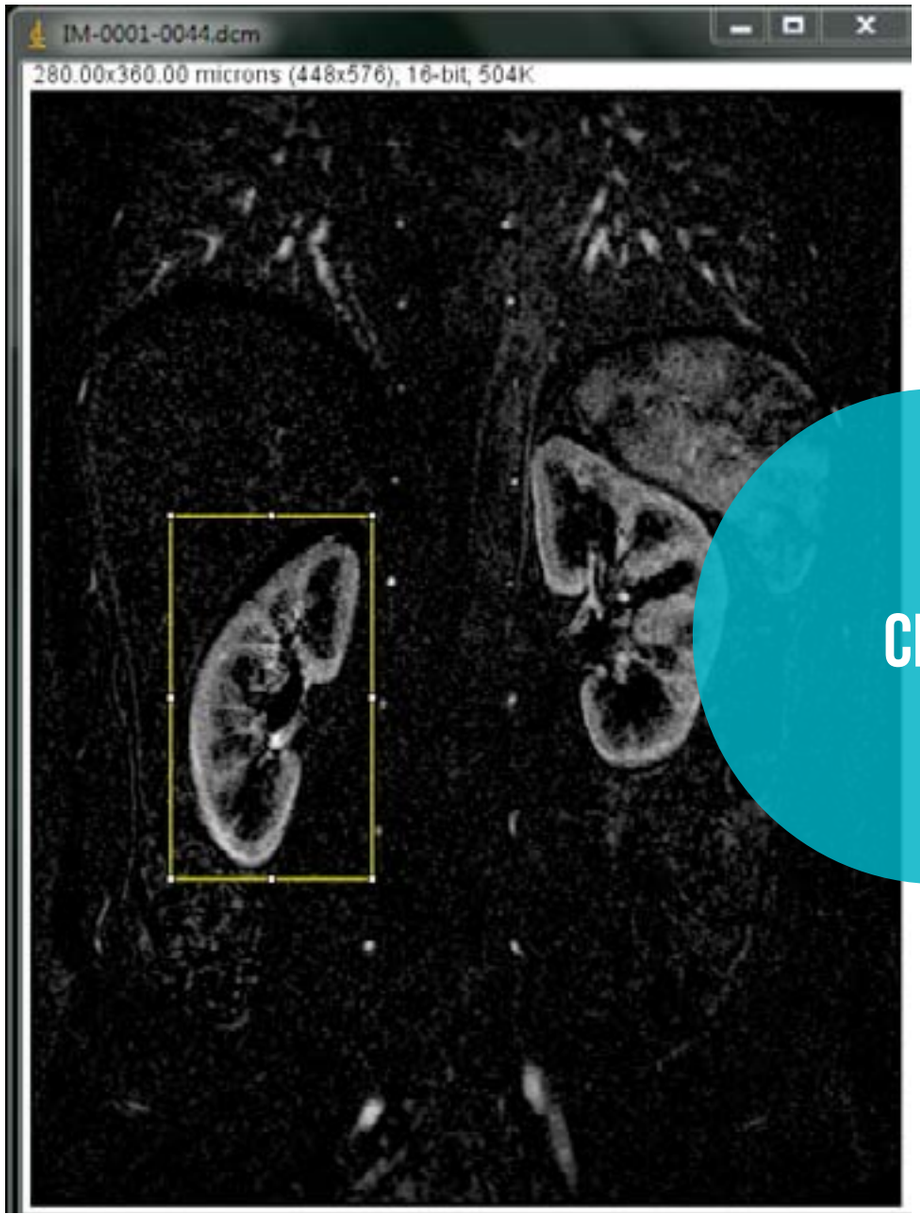




CROP



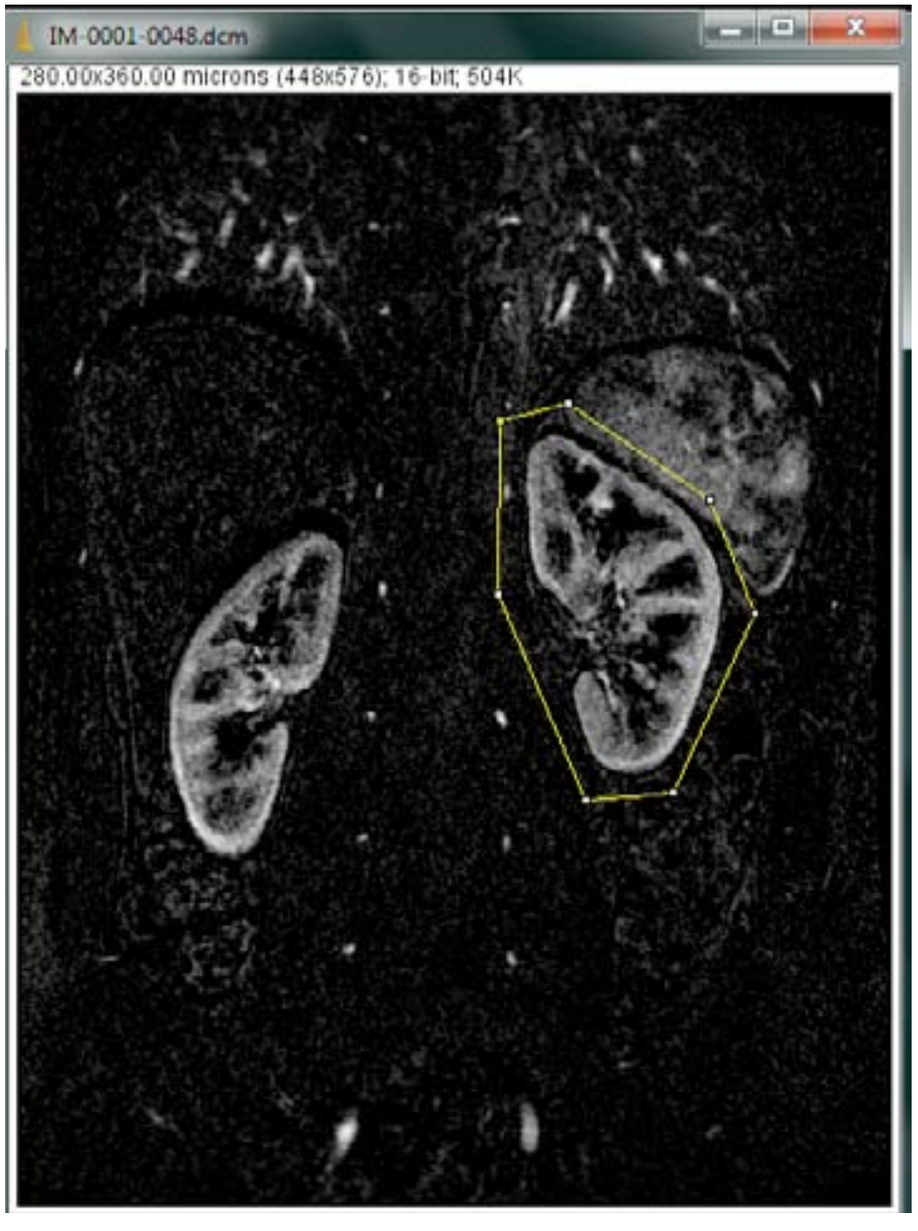
CROP


IM-0001-0044.dcm
280.00x360.00 microns (448x576), 16-bit; 504K
CROP

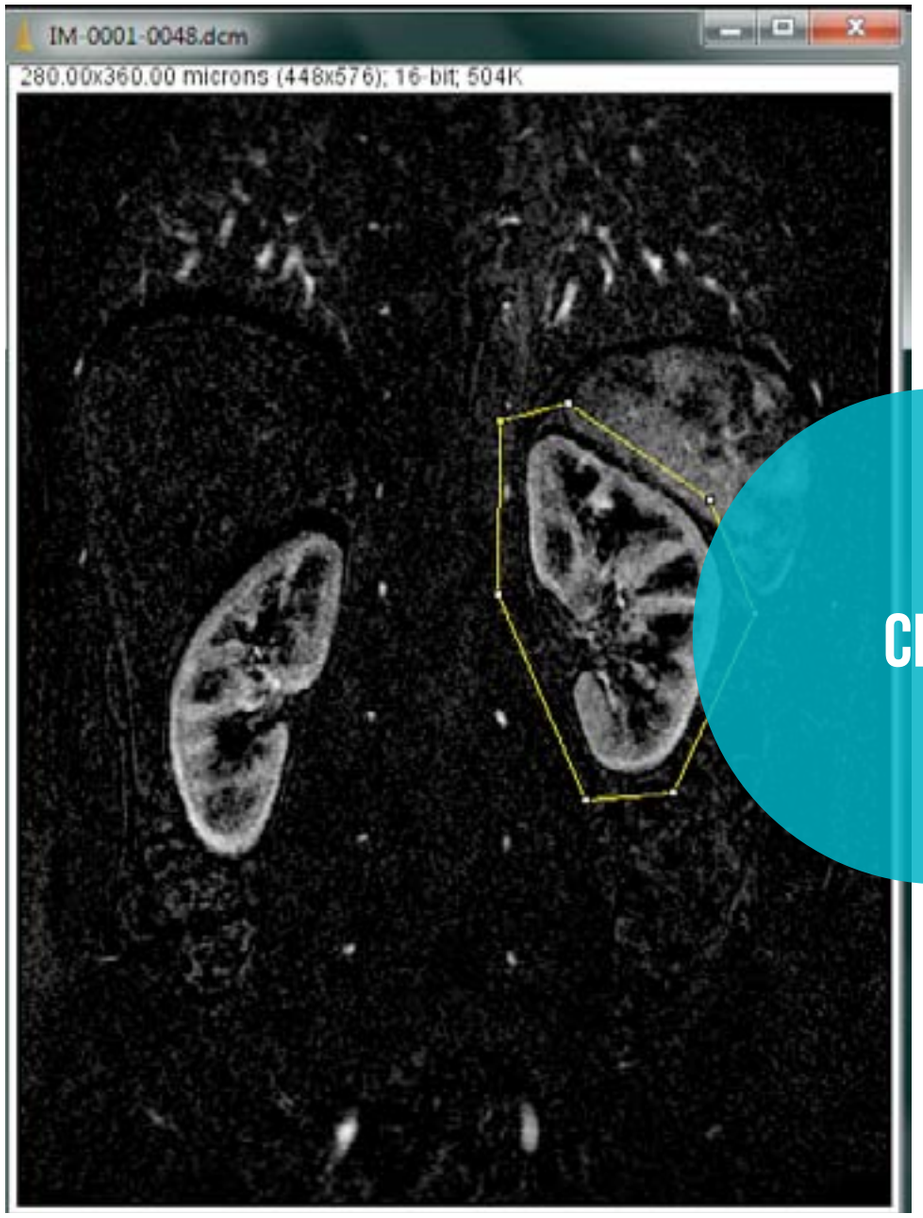
CROP


IM-0001-0044.dcm
280.00x360.00 microns (448x576); 16-bit; 504K
CROP
IM-0001-0044.dcm
65.00x117.50 microns (104x188); 16-bit; 38K

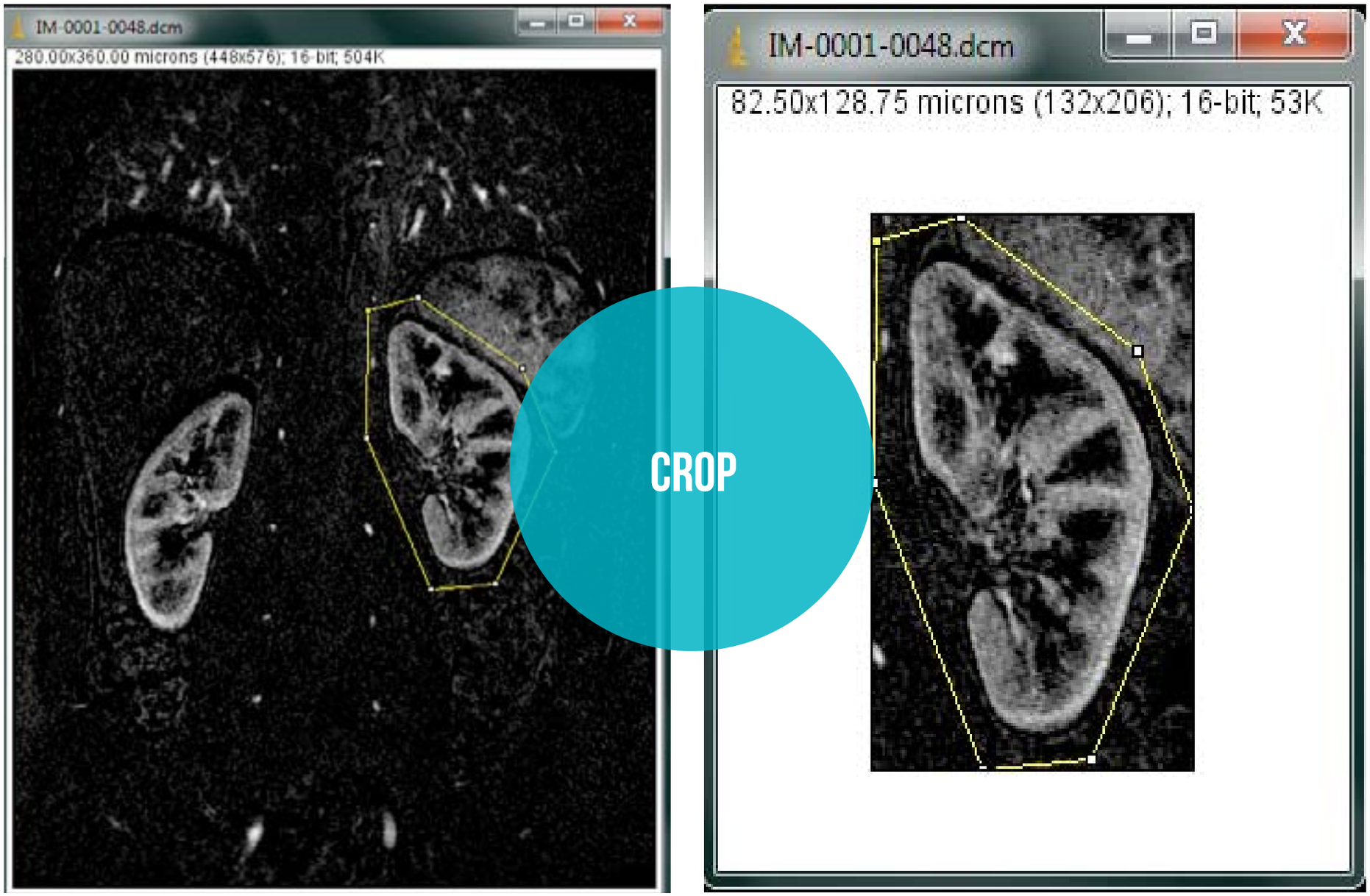
CROP



CROP

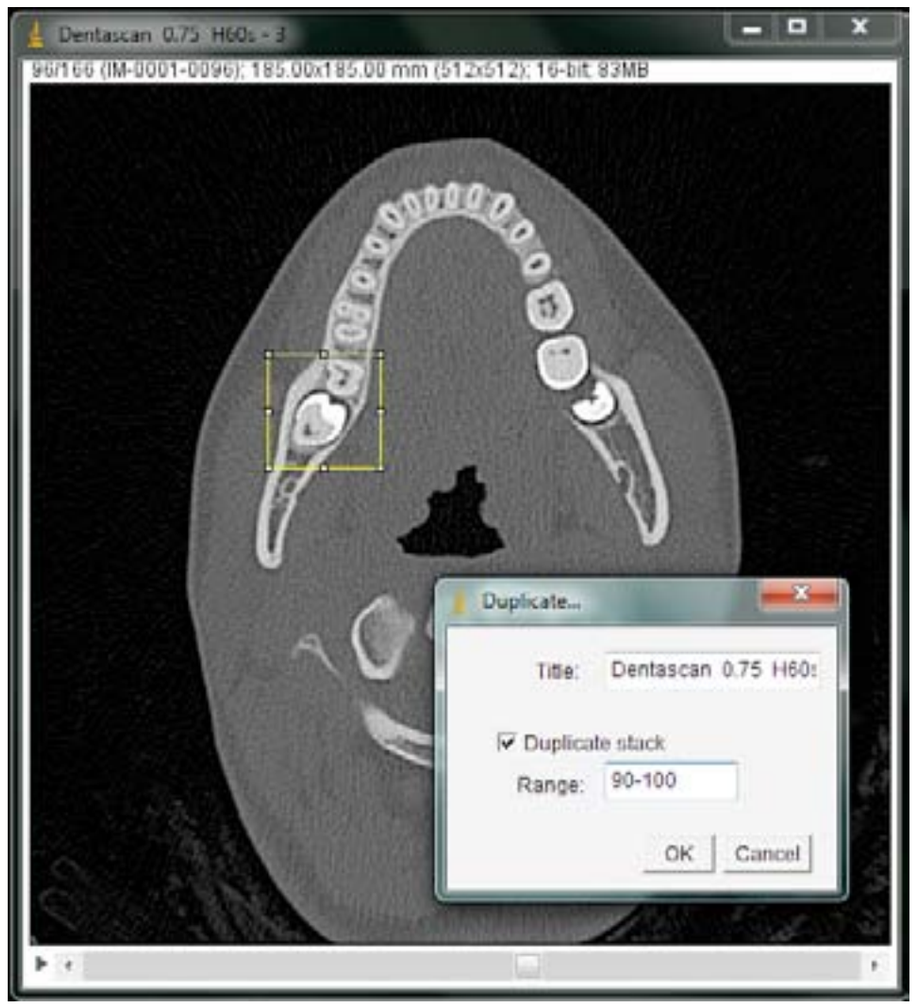

IM-0001-0048.dcm
280.00x360.00 microns (448x576); 16-bit; 504K
CROP

CROP


IM-0001-0048.dcm
280.00x360.00 microns (448x576); 16-bit; 504K
CROP
IM-0001-0048.dcm
82.50x128.75 microns (132x206); 16-bit; 53K

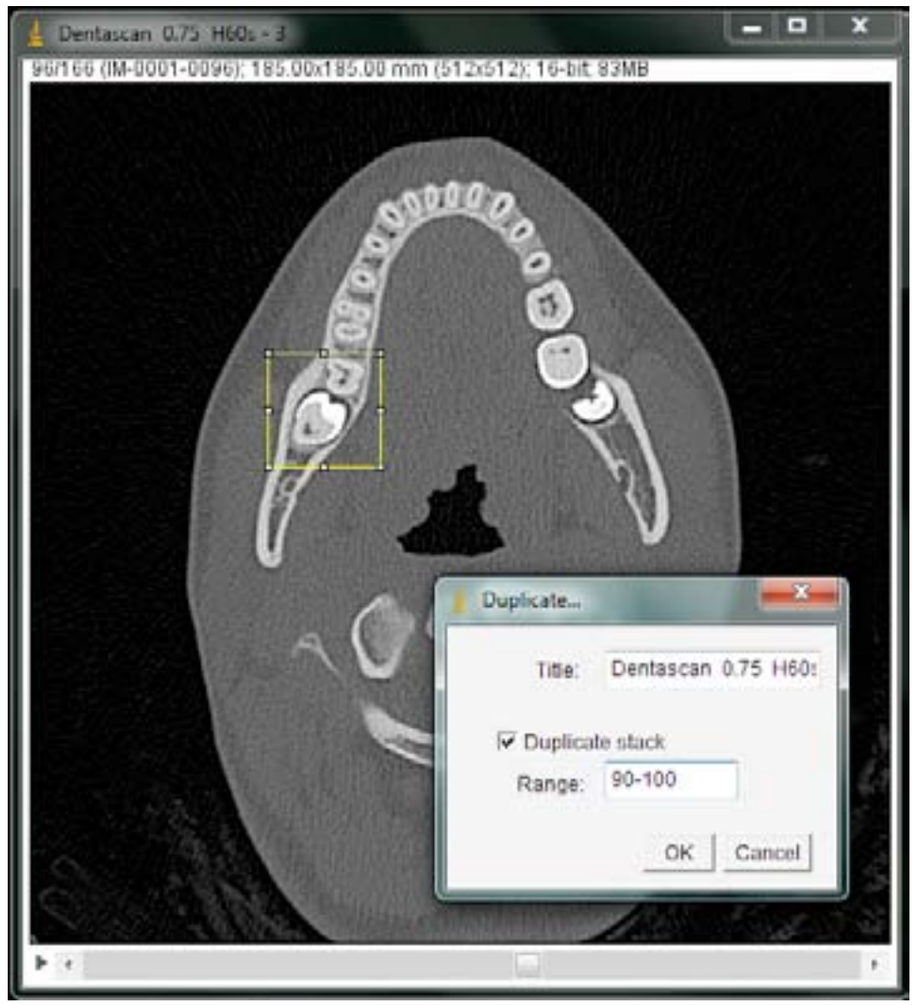
DUPLICATE


IM-0001-0012.dcm
320.00x224.00 microns (320x224), 16-bit, 140K


Dentascan 0.75 H60s - 3
96/160 (IM-0001-0096); 185.00x185.00 mm (512x512); 16-bit; 83MB
Duplicate...
Title:
Dentascan 0.75 H60s
Duplicate stack
Range:
90-100
OK
Cancel

DUPLICATE

DUPLICATE

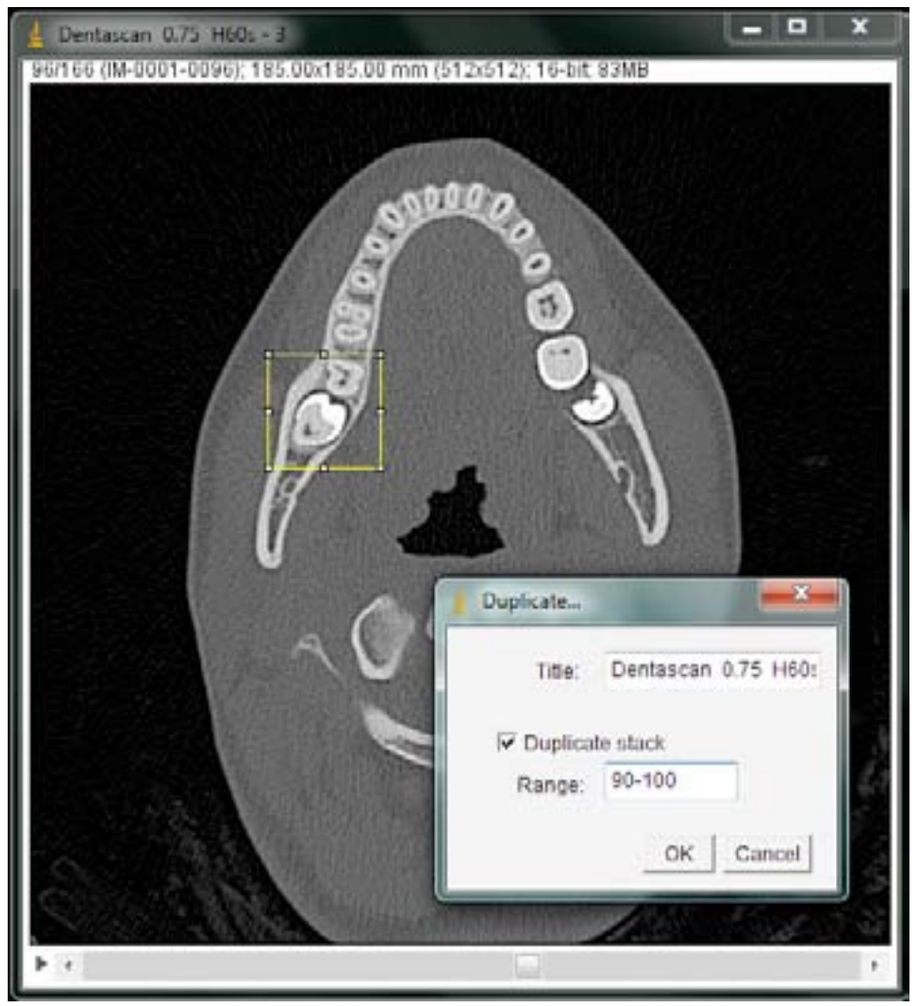


DUPLICATE

DUPLICATE

DUPLICATE

DUPLICATE

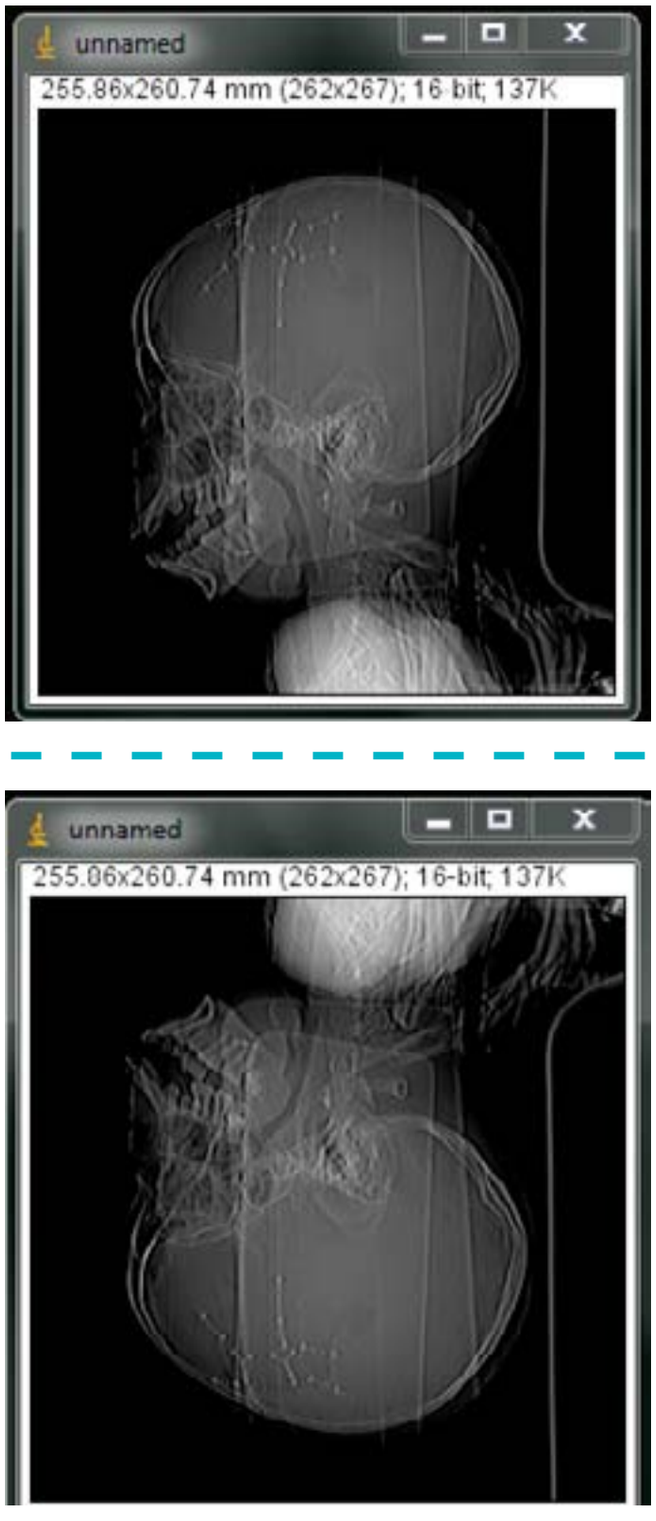


TRANSFORM

Flip Horizontally

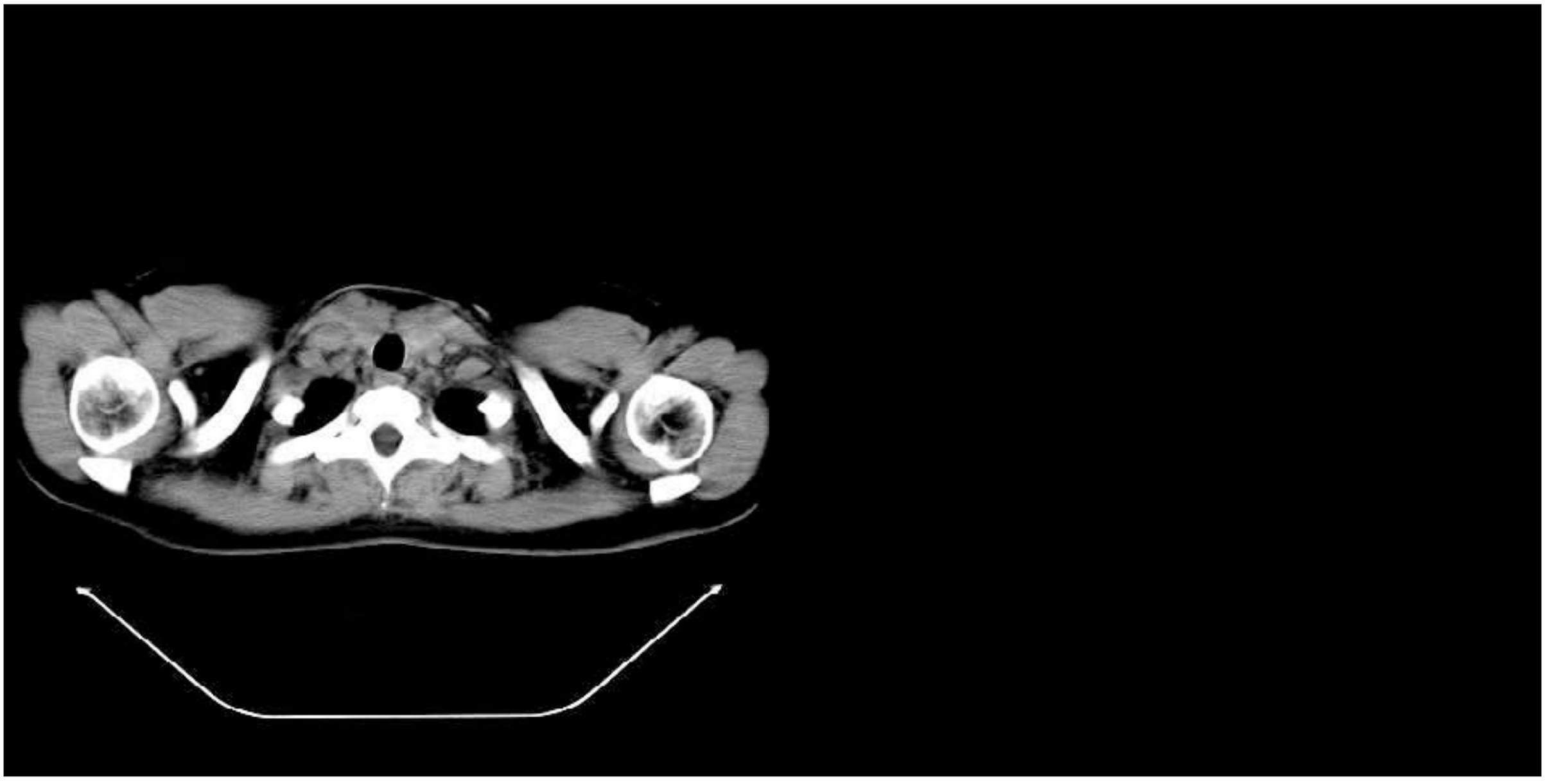
TRANSFORM

Flip Vertically



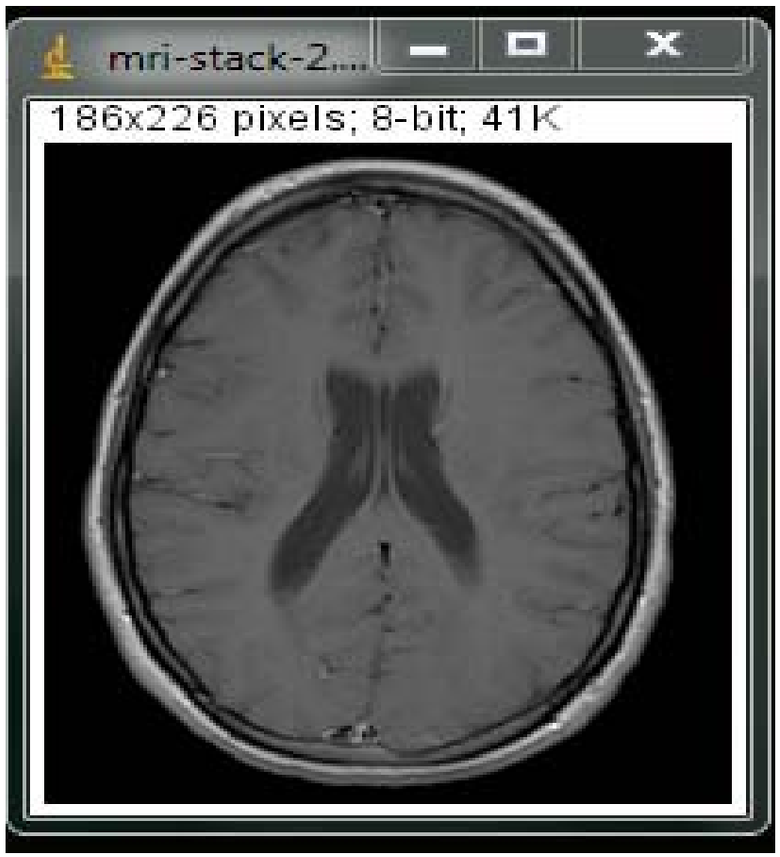
TRANSFORM

Flip Z



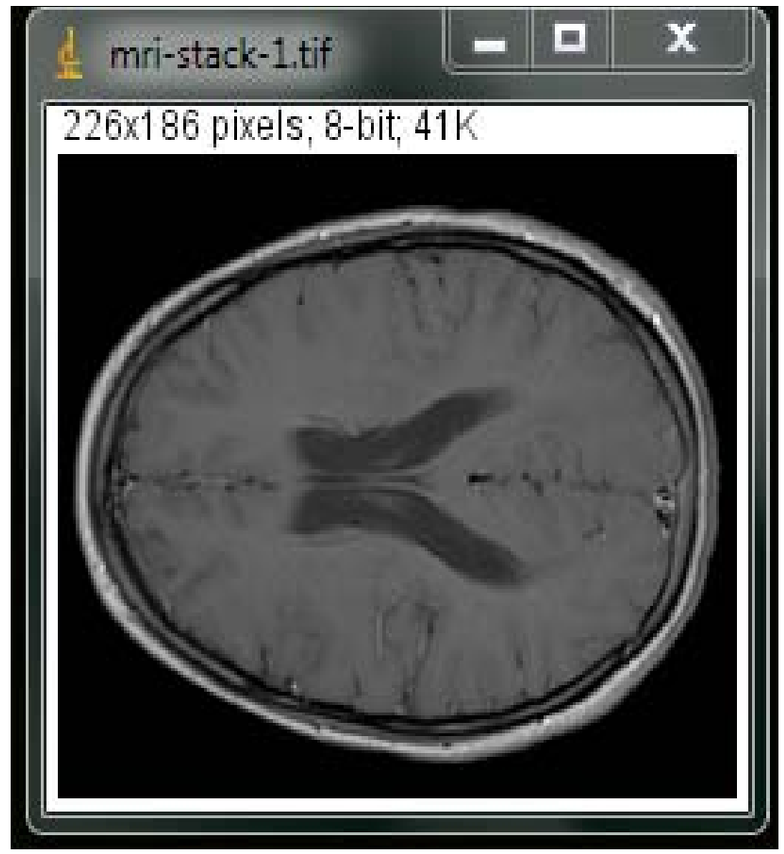
TRANSFORM

Rotate 90º Right & Left



ORIGINAL

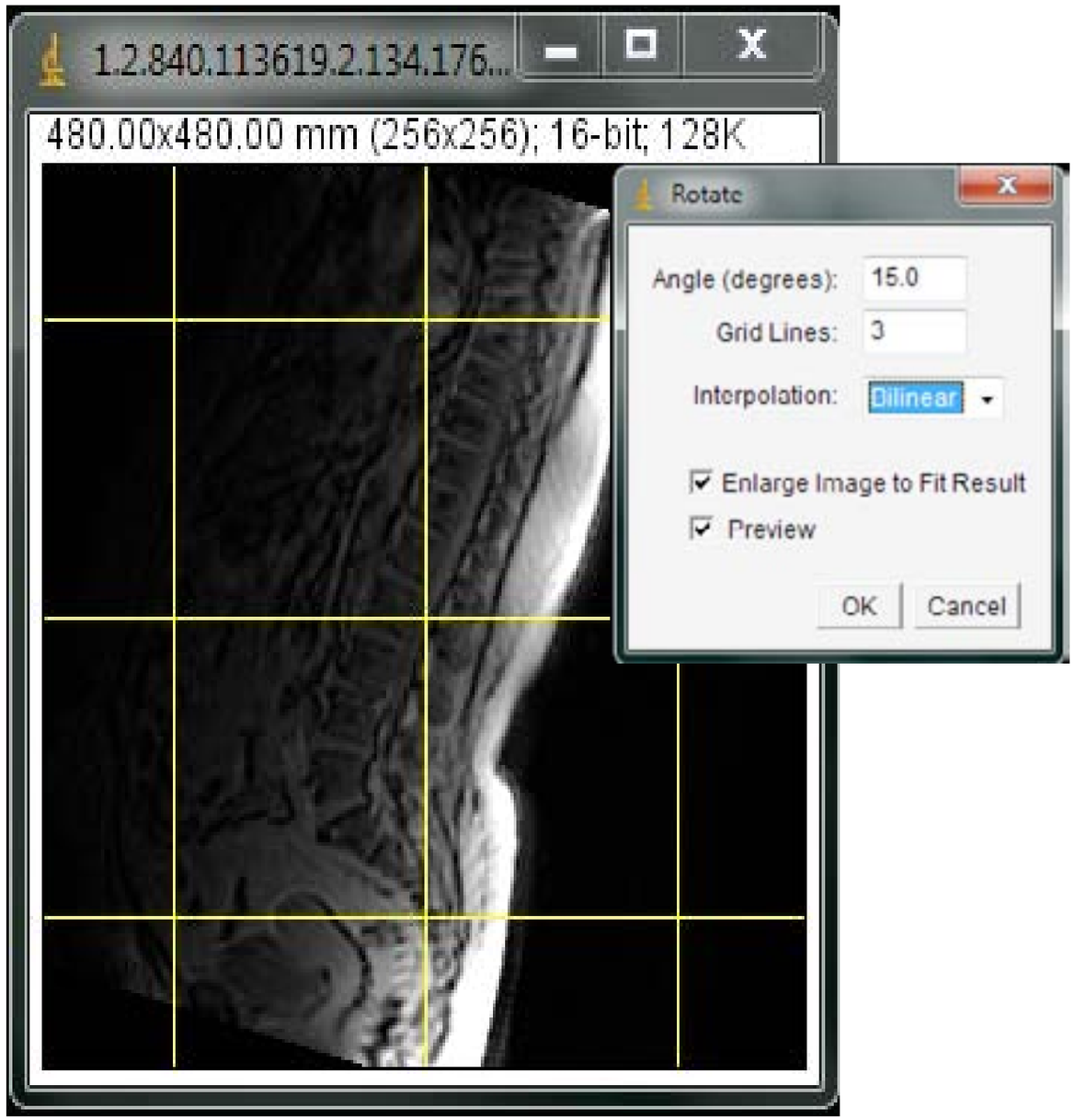
90º DIREITA



90º ESQUERDA

TRANSFORM

Rotate...

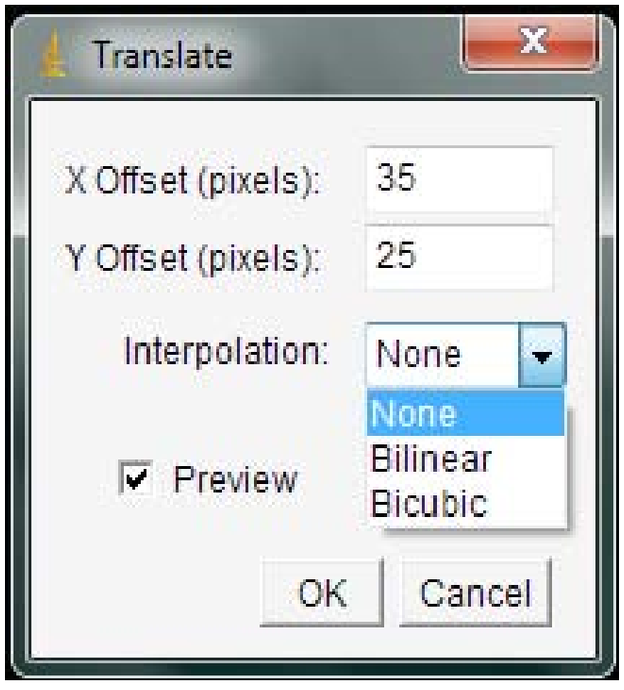


INTERPOLAÇÃO BILINEAR

INTERPOLAÇÃO BICÚBICA

TRANSFORM

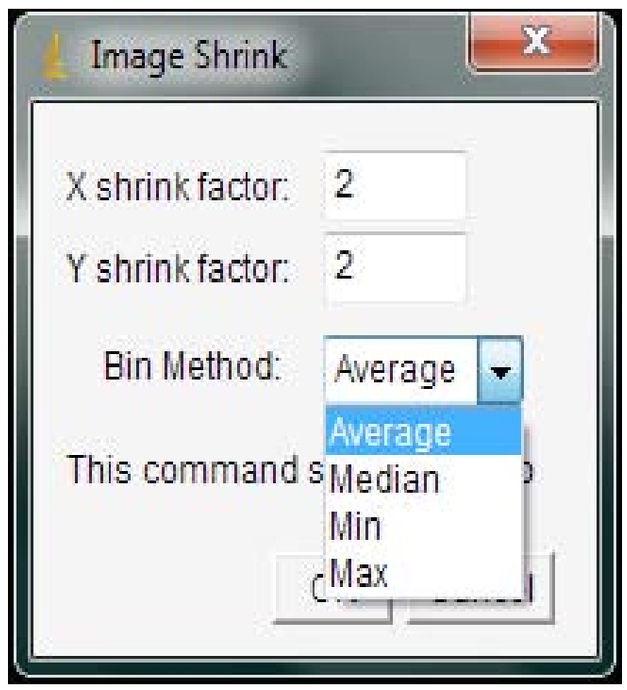
Translate...

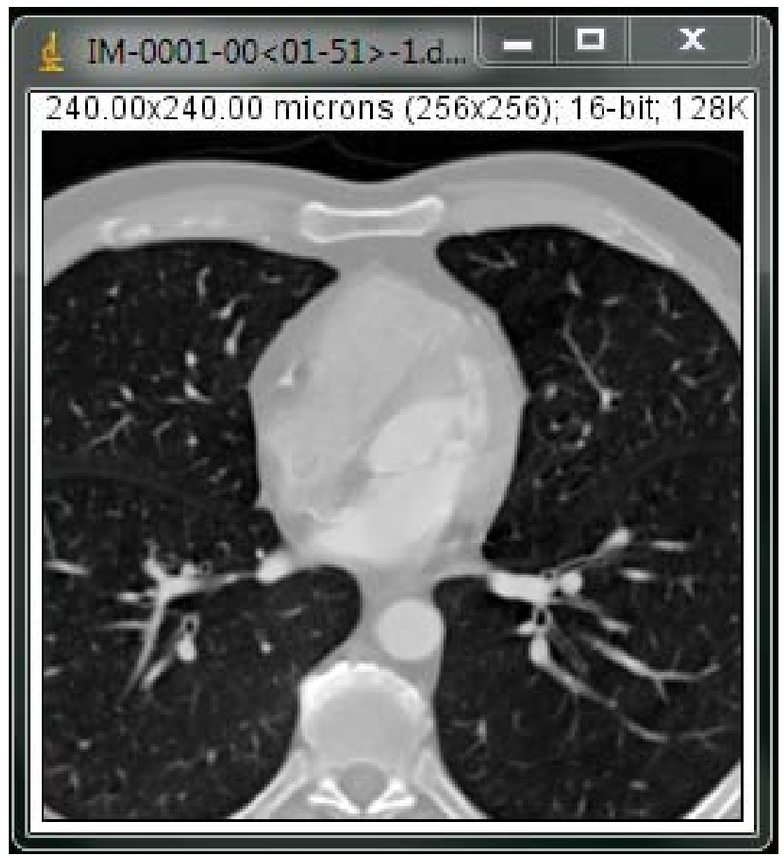


TRANSFORM

Bin...

512X512

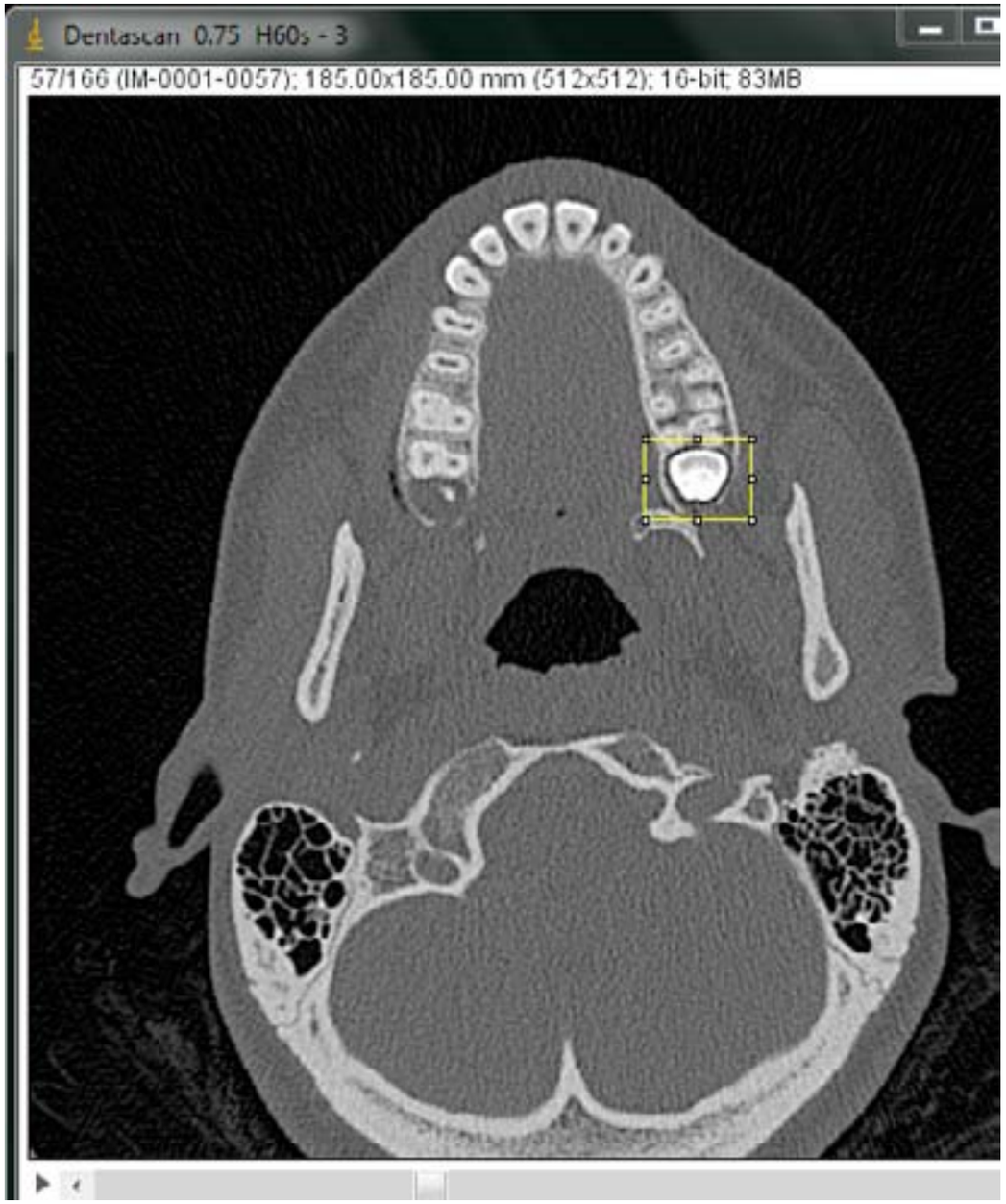


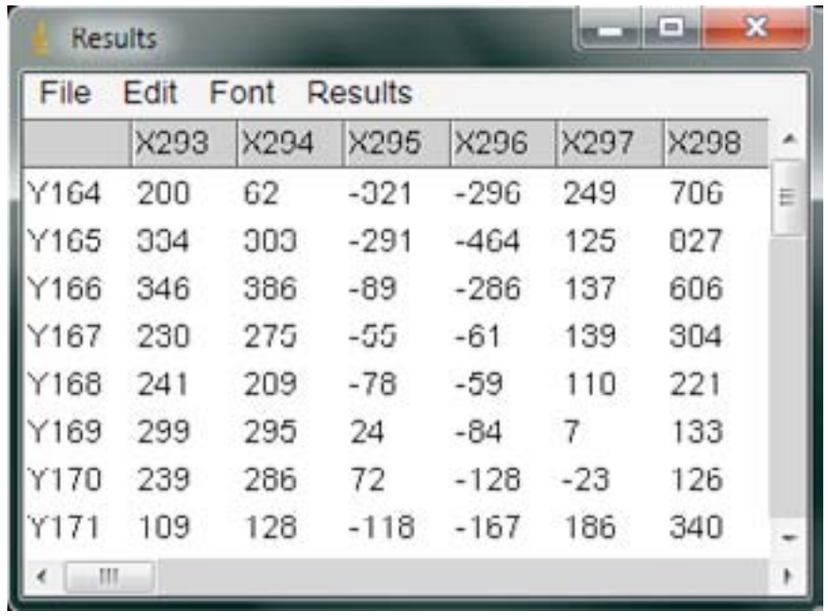


256X256

TRANSFORM

Image to Results

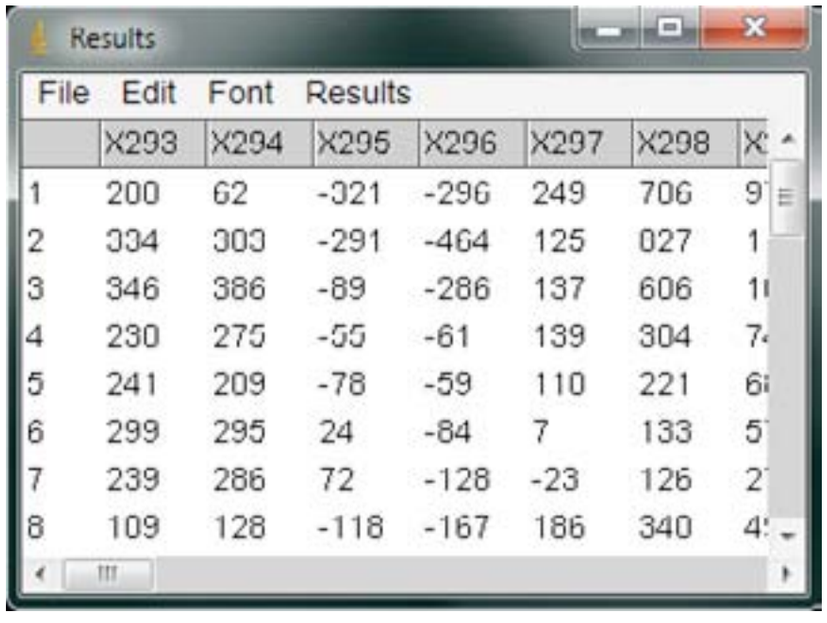


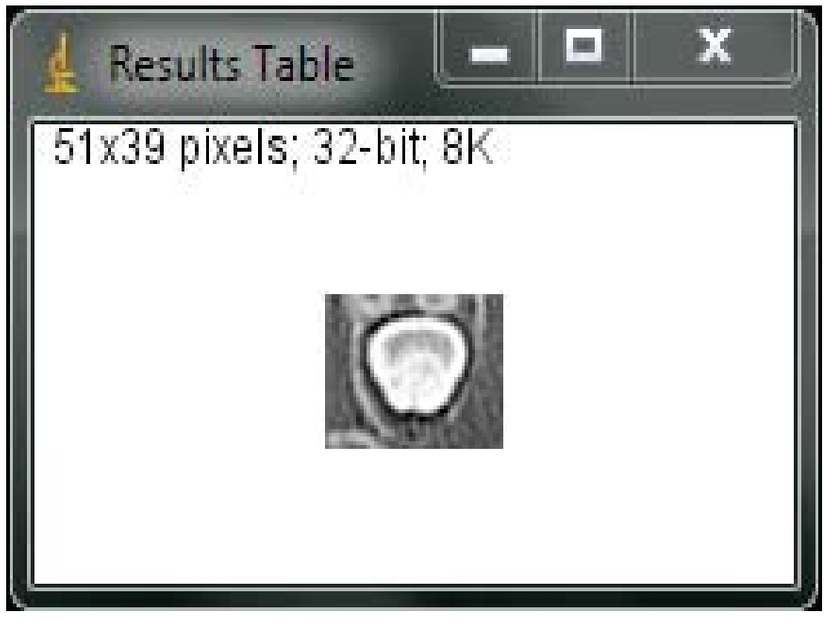


	X293	X294	X295	X296	X297	X298
Y164	200	62	-321	-296	249	706
Y165	334	303	-291	-464	125	027
Y166	346	386	-89	-286	137	606
Y167	230	275	-55	-61	139	304
Y168	241	209	-78	-59	110	221
Y169	299	295	24	-84	7	133
Y170	239	286	72	-128	-23	126
Y171	109	128	-118	-167	186	340

TRANSFORM

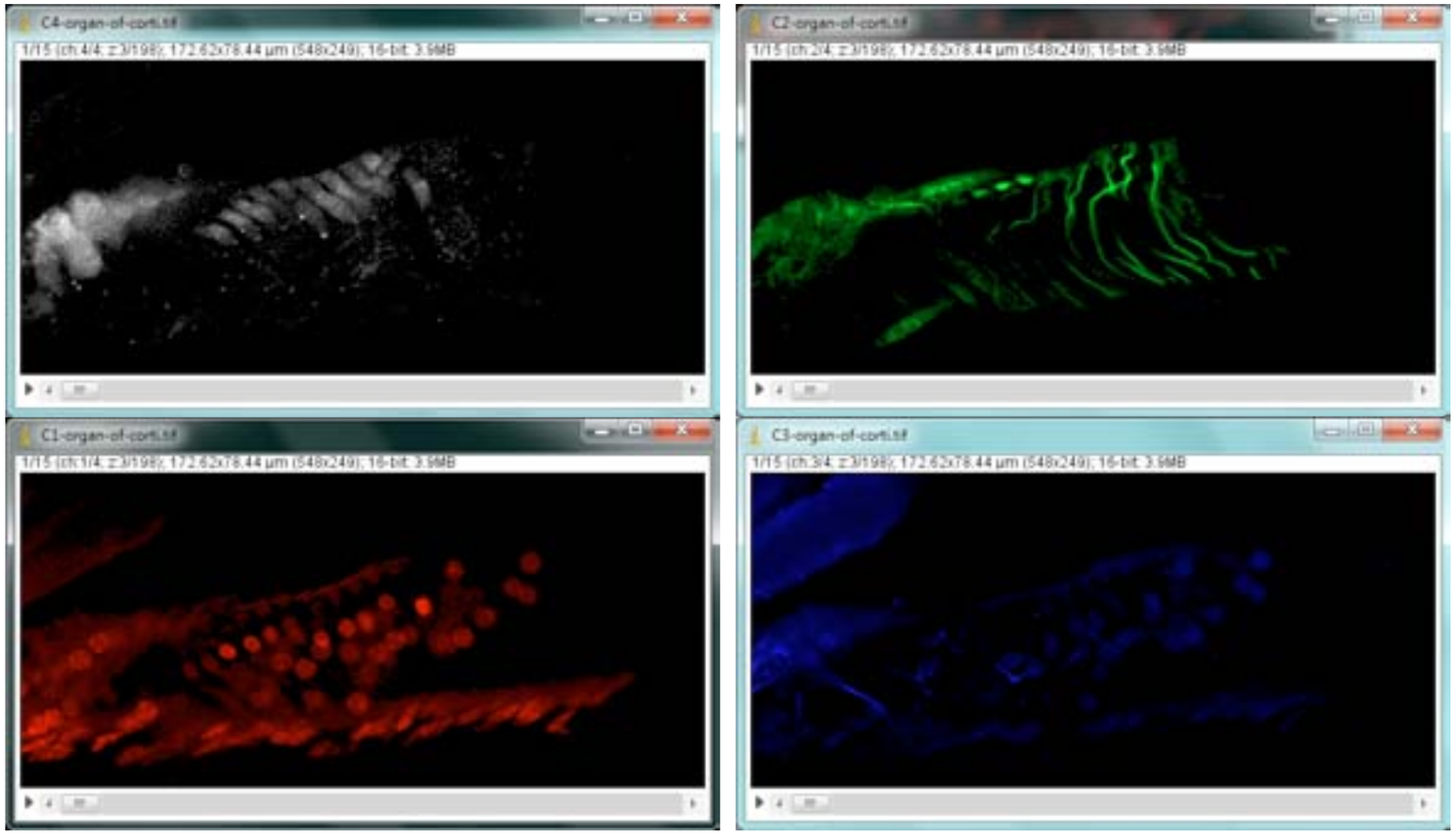
Results to Image

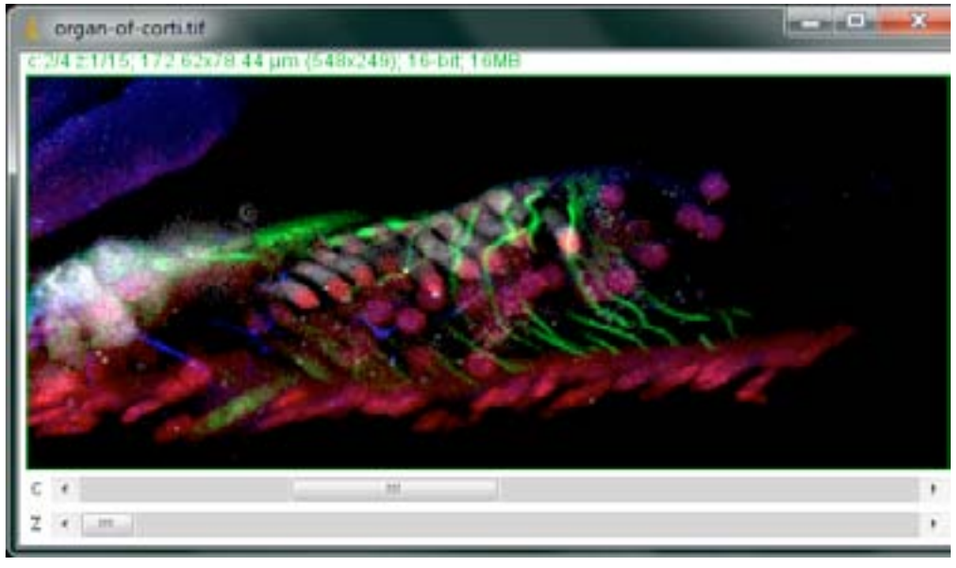




COLOR

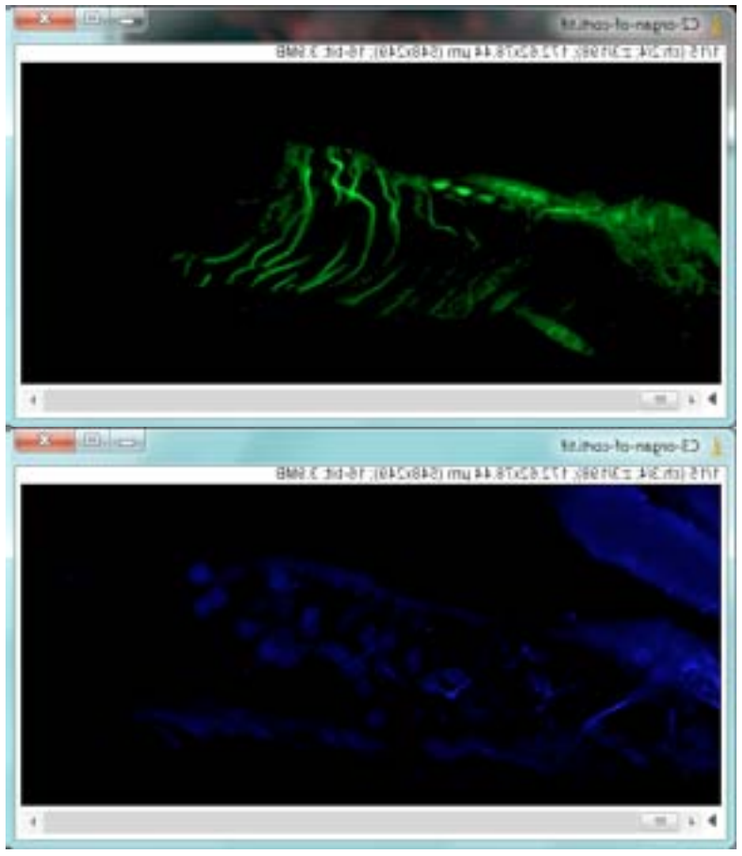
Split Channels

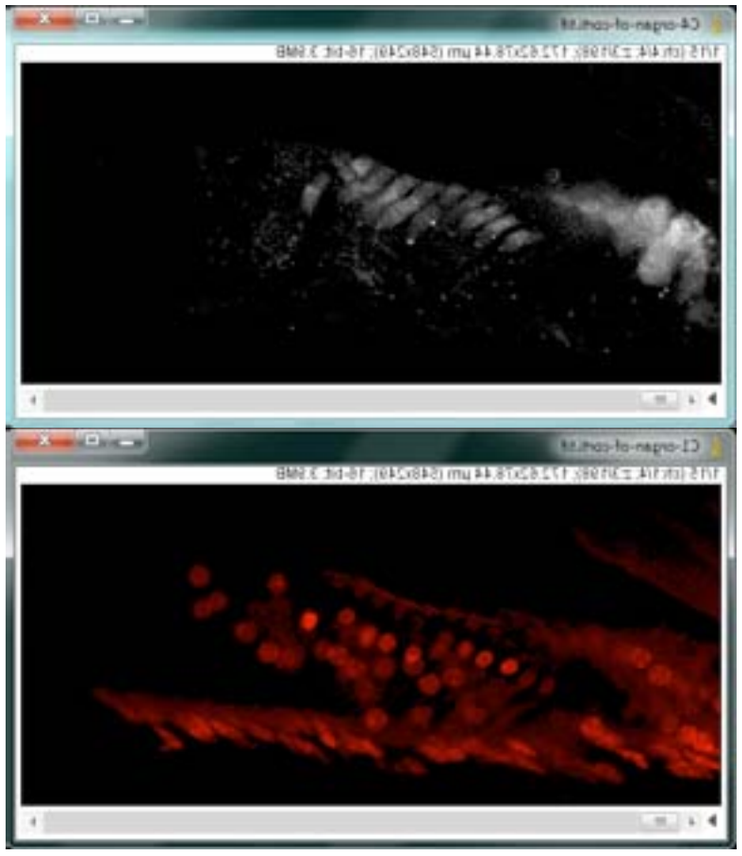


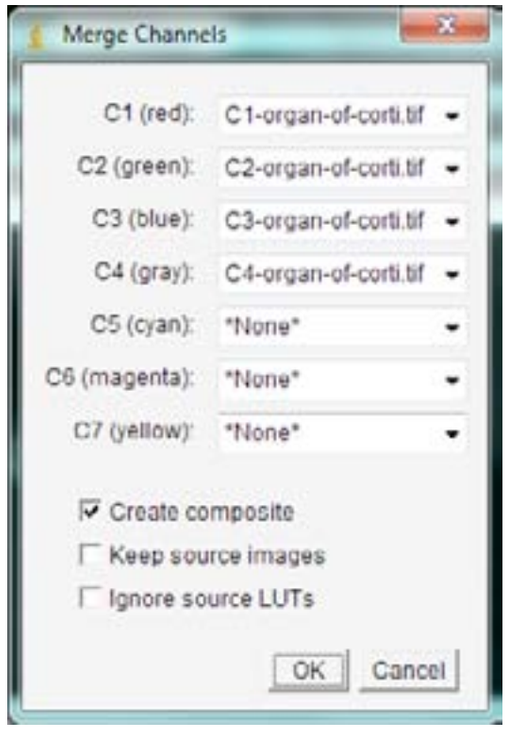


COLOR

Merge Channels







COLOR

Stack to RGB

COLOR

Make Composite

IMAGEM RGB

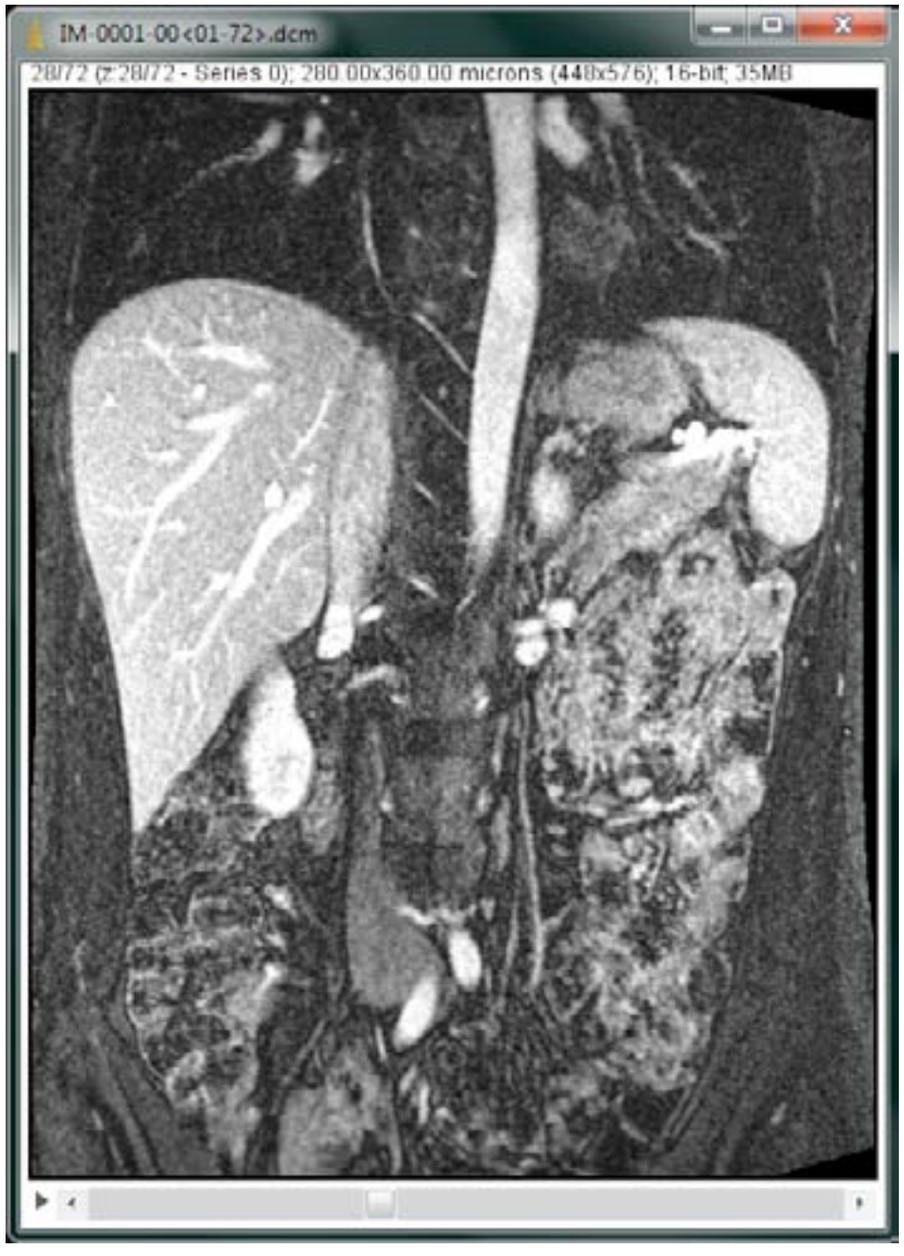
STACK

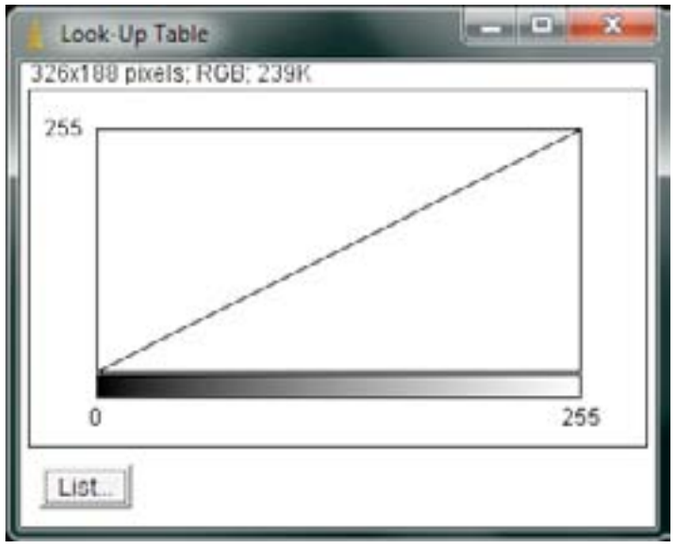
HYPERSTACK

IMAGEM COMPOSTA

COLOR

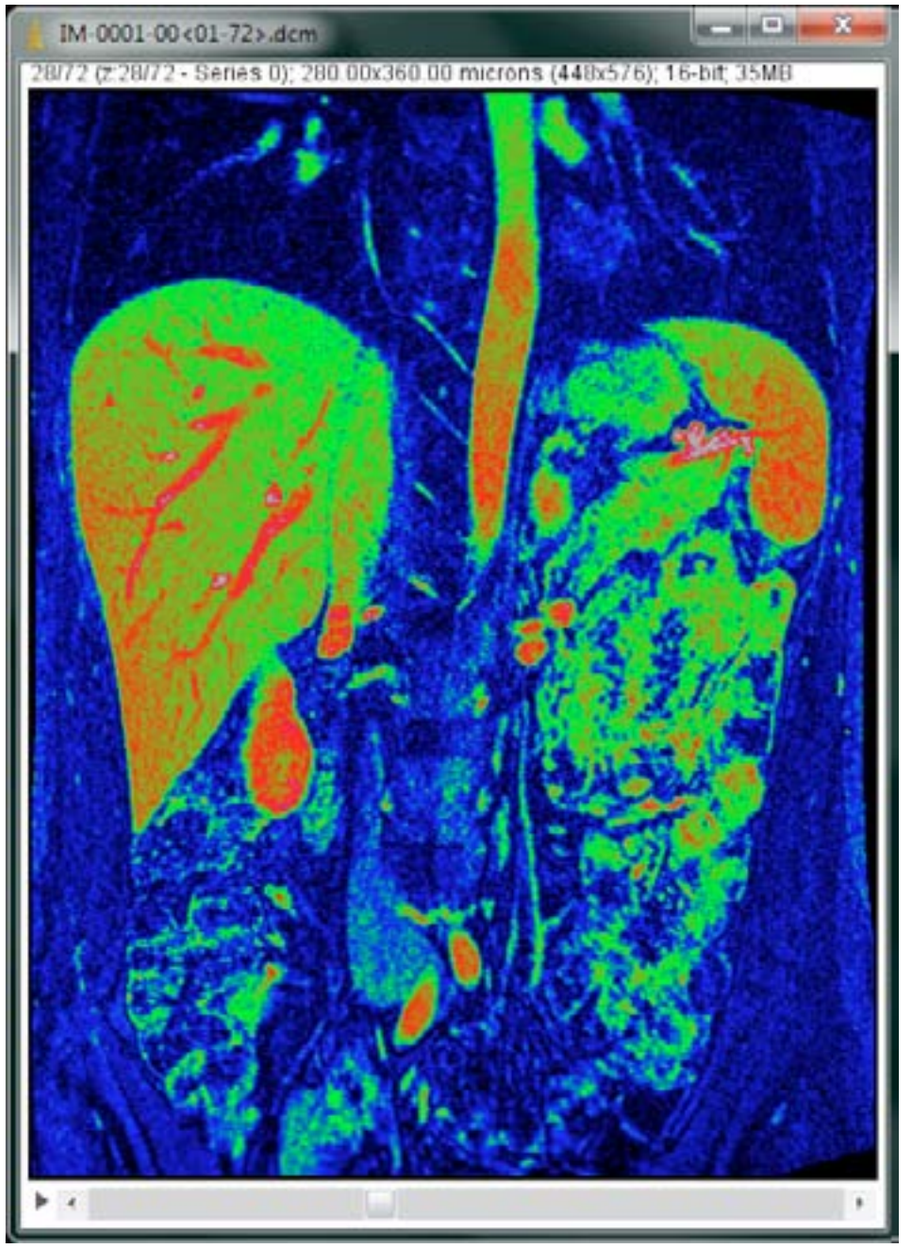
Show LUT

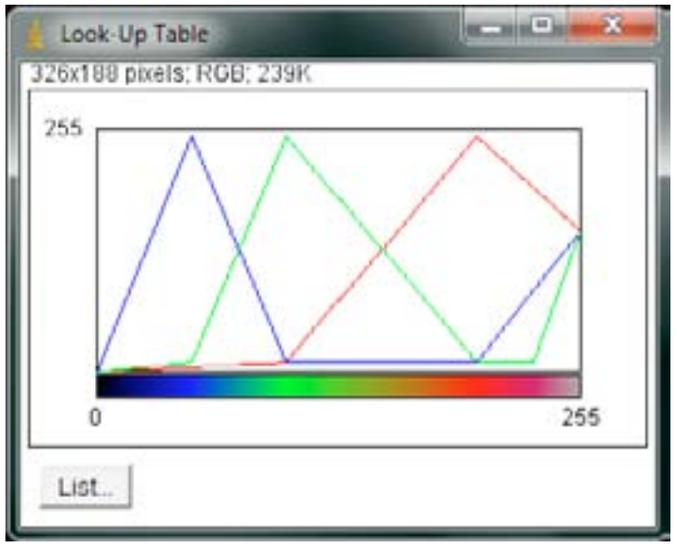




COLOR

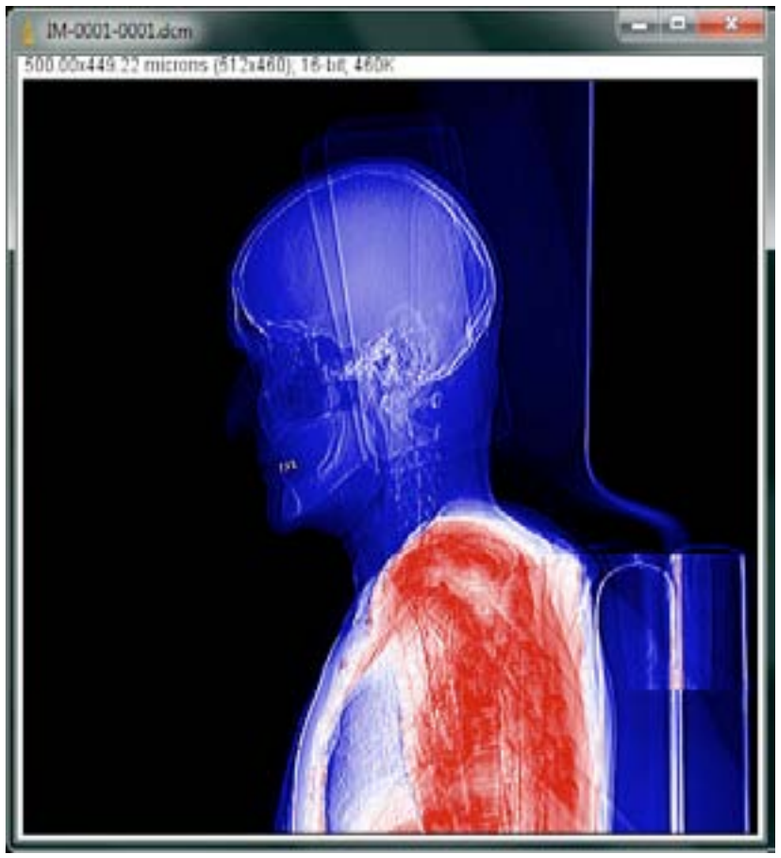
Show LUT

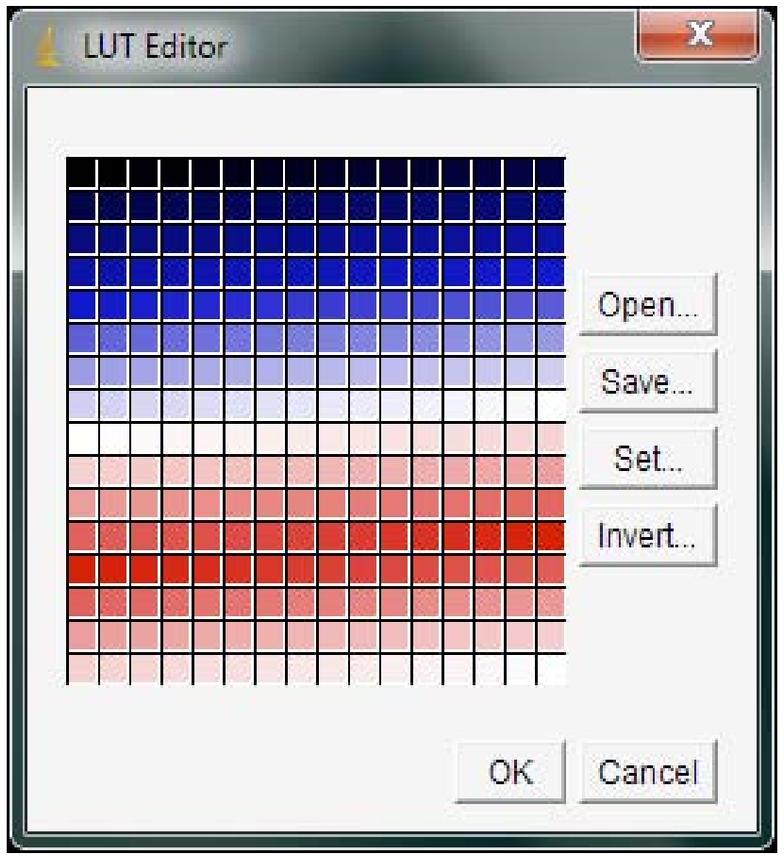


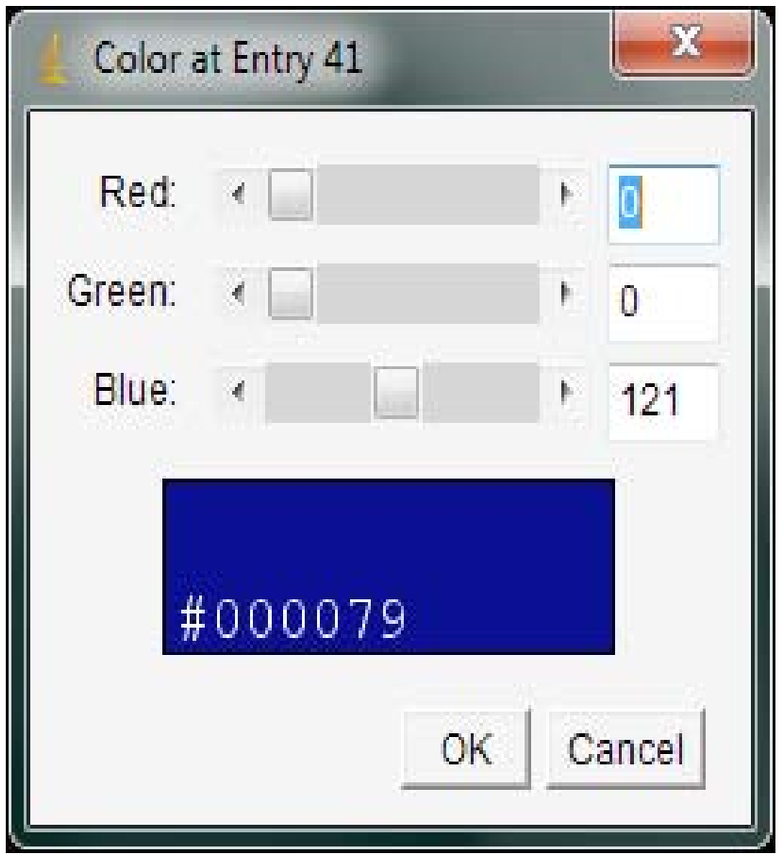


COLOR

Edit LUT

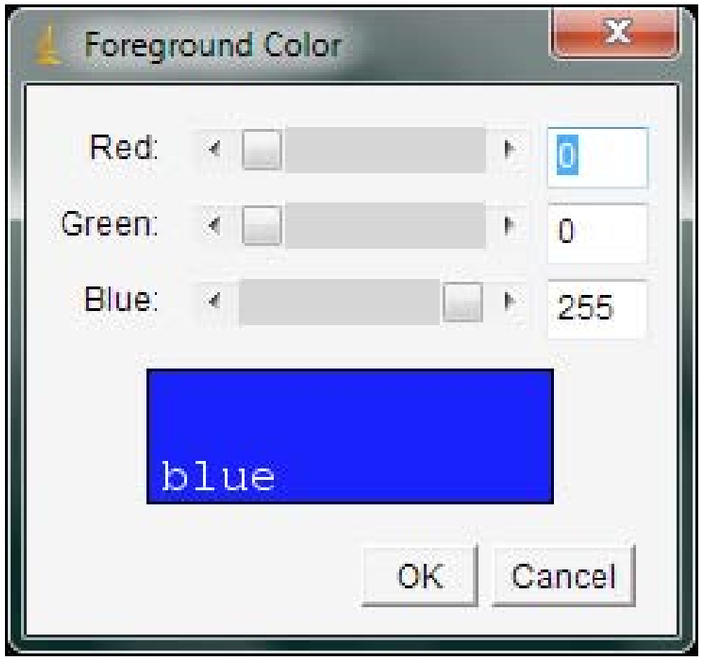


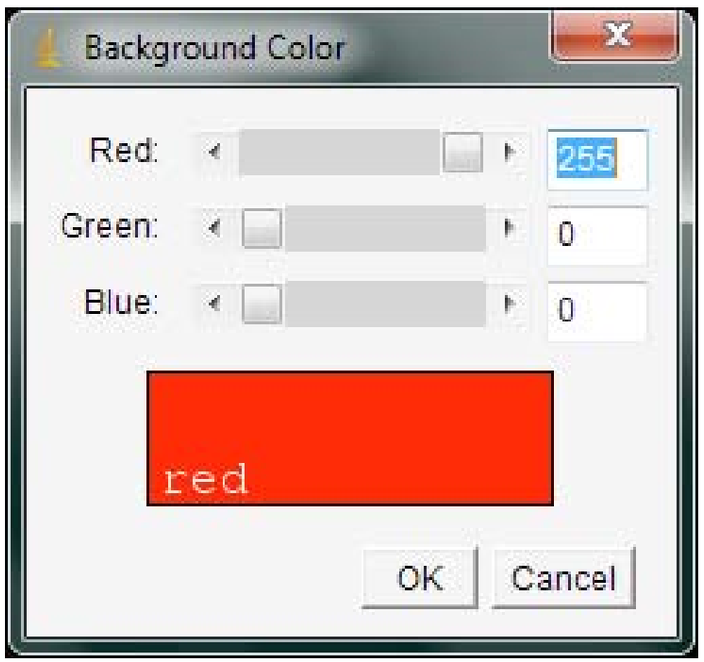




COLOR

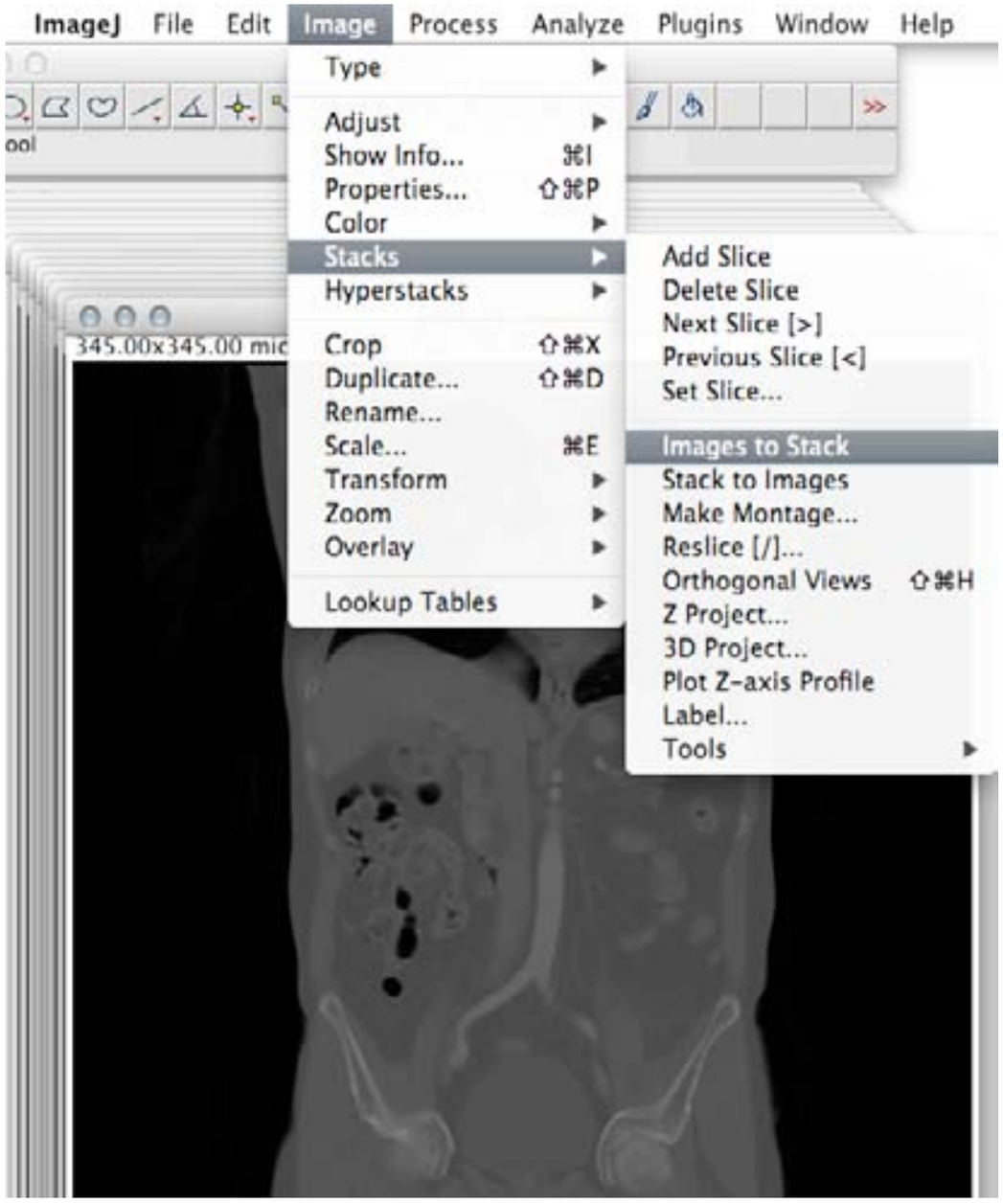
Color Picker





STACKS

Images to Stack / Stack to Images



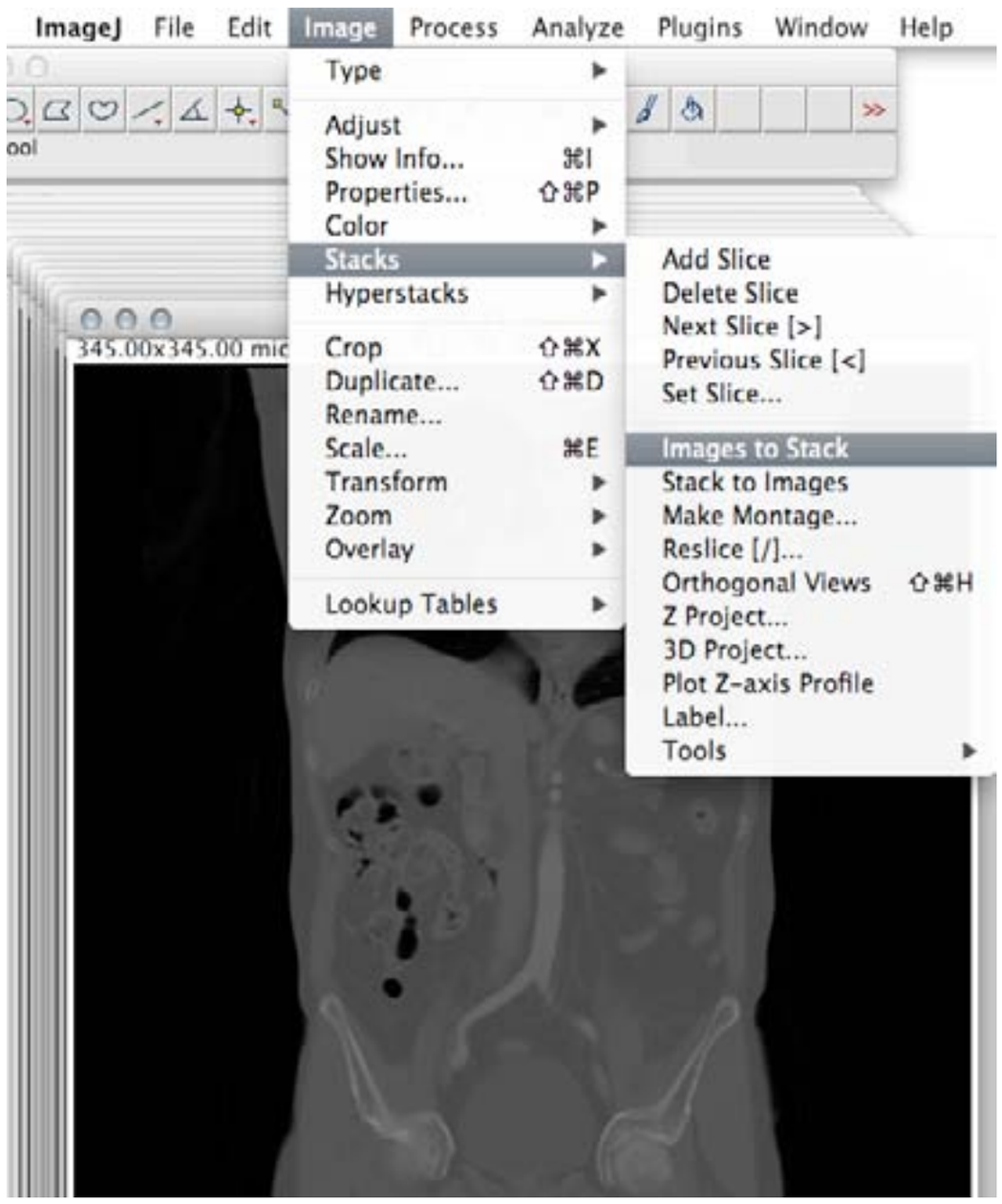
CONJUNTO DE IMAGENS

STACK

STACKS

Images to Stack / Stack to Images

STACK



CONJUNTO DE IMAGENS

STACKS

Images to Stack

TAMANHO

METHOD

COPY (TOP-LEFT)

COPY (CENTER)

SCALE (SMALLEST)

SCALE (LARGEST)

STACKS

Images to Stack

TAMANHO

PROFUNDIDADE DE BITS

METHOD

COPY (TOP-LEFT)

COPY (CENTER)

SCALE (SMALLEST)

SCALE (LARGEST)

STACKS

Images to Stack

TAMANHO

PROFUNDIDADE DE BITS

MEMÓRIA

METHOD

COPY (TOP-LEFT)

COPY (CENTER)

SCALE (SMALLEST)

SCALE (LARGEST)

RAM

VIRTUAL STACK

STACKS

Add Slice

20/32

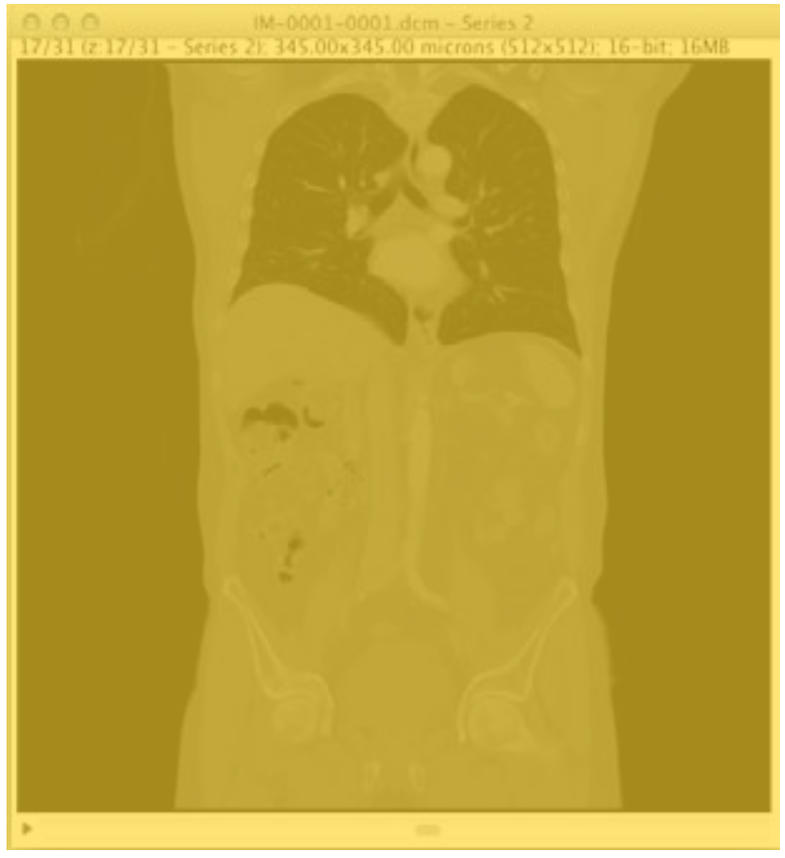
21/32

~~21/32~~ 22/32

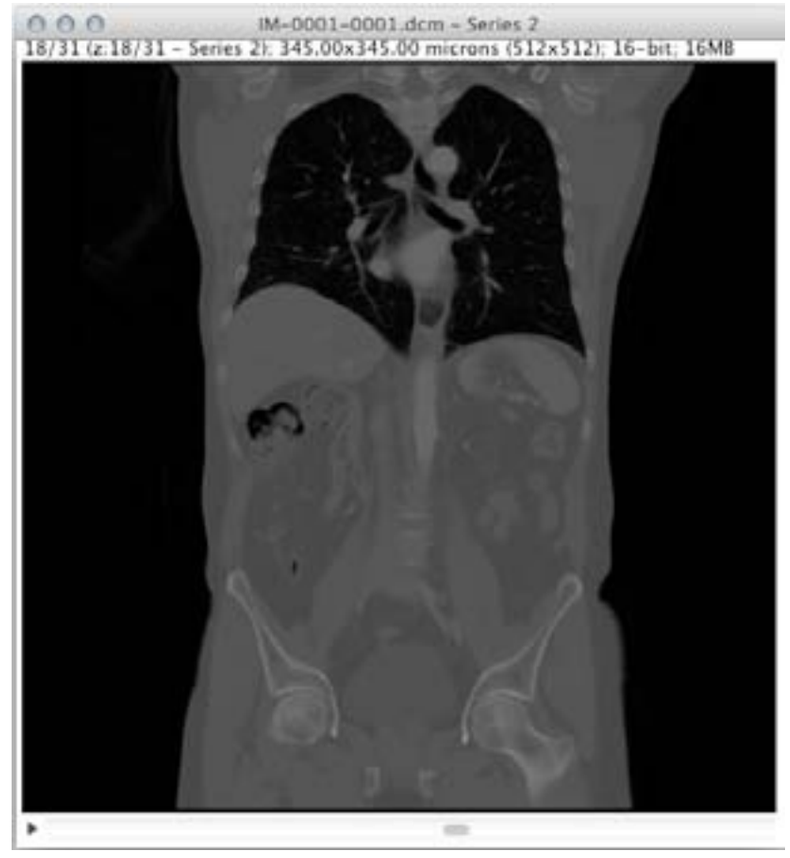
STACKS

Delete Slice

16/32



~~17/32~~



~~18/32~~ 17/32

STACKS

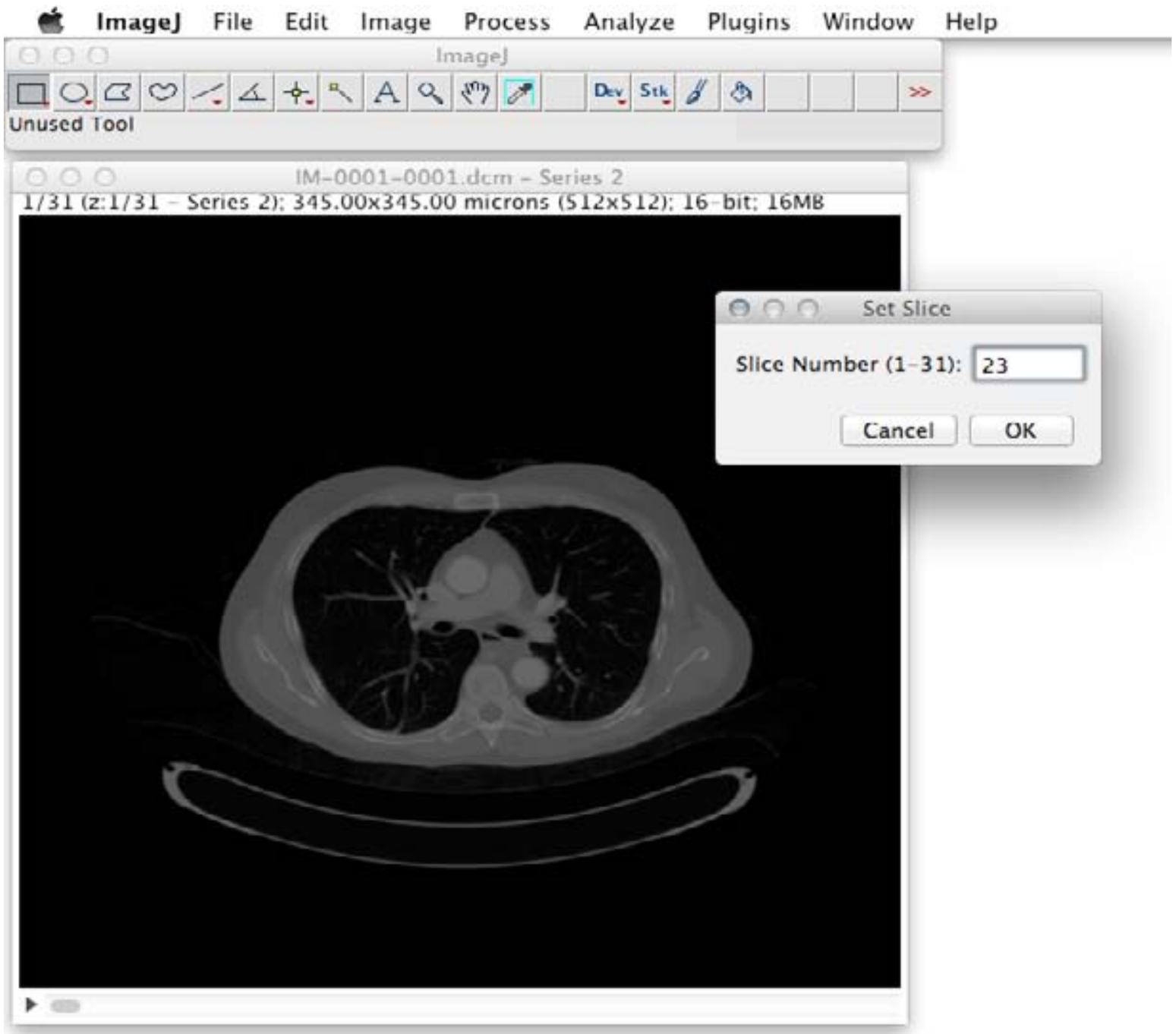
Next Slice / Previous Slice

\> NEXT SLICE

< PREVIOUS SLICE

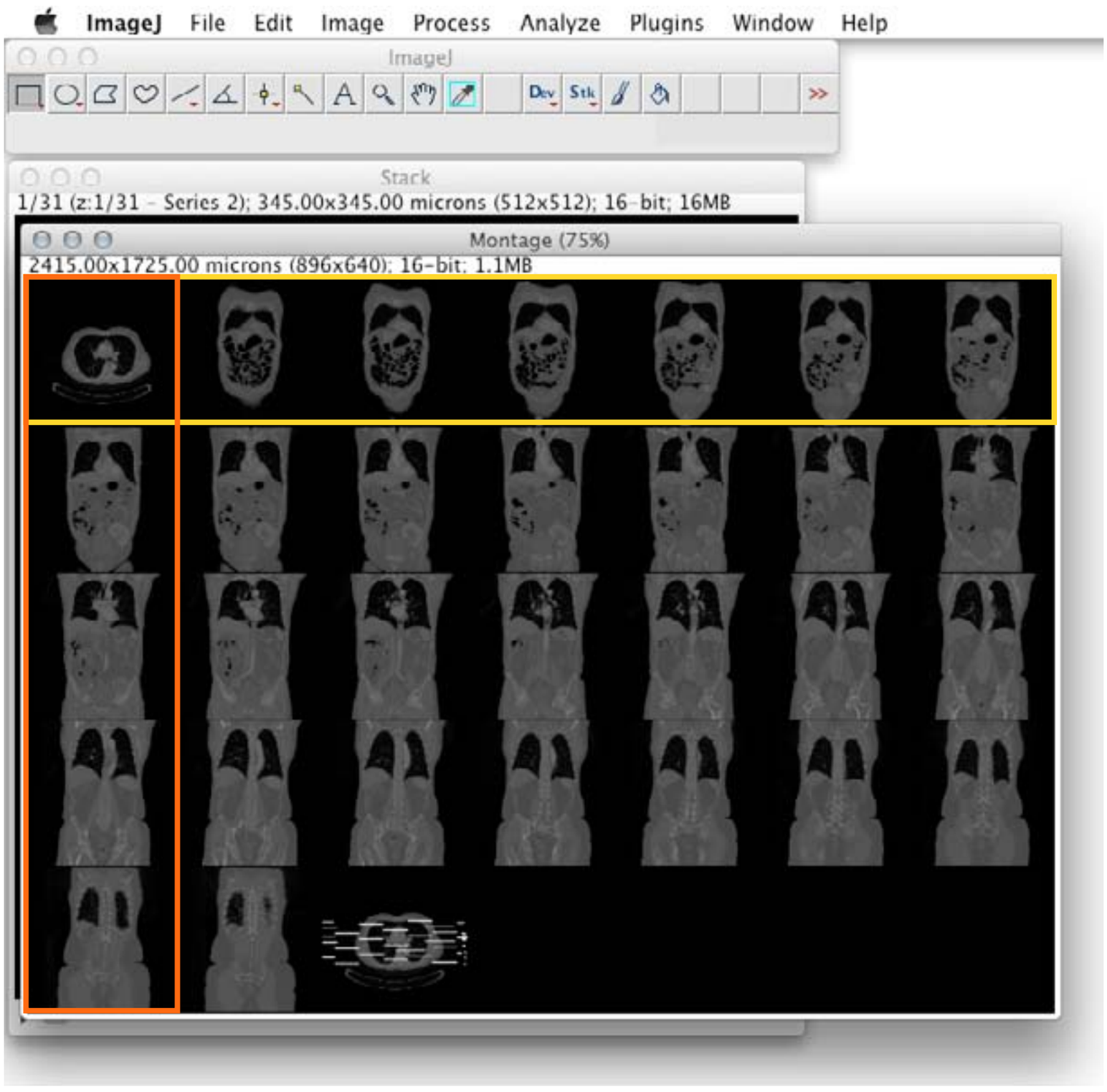
STACKS

Set Slice...



STACKS

Make Montage...



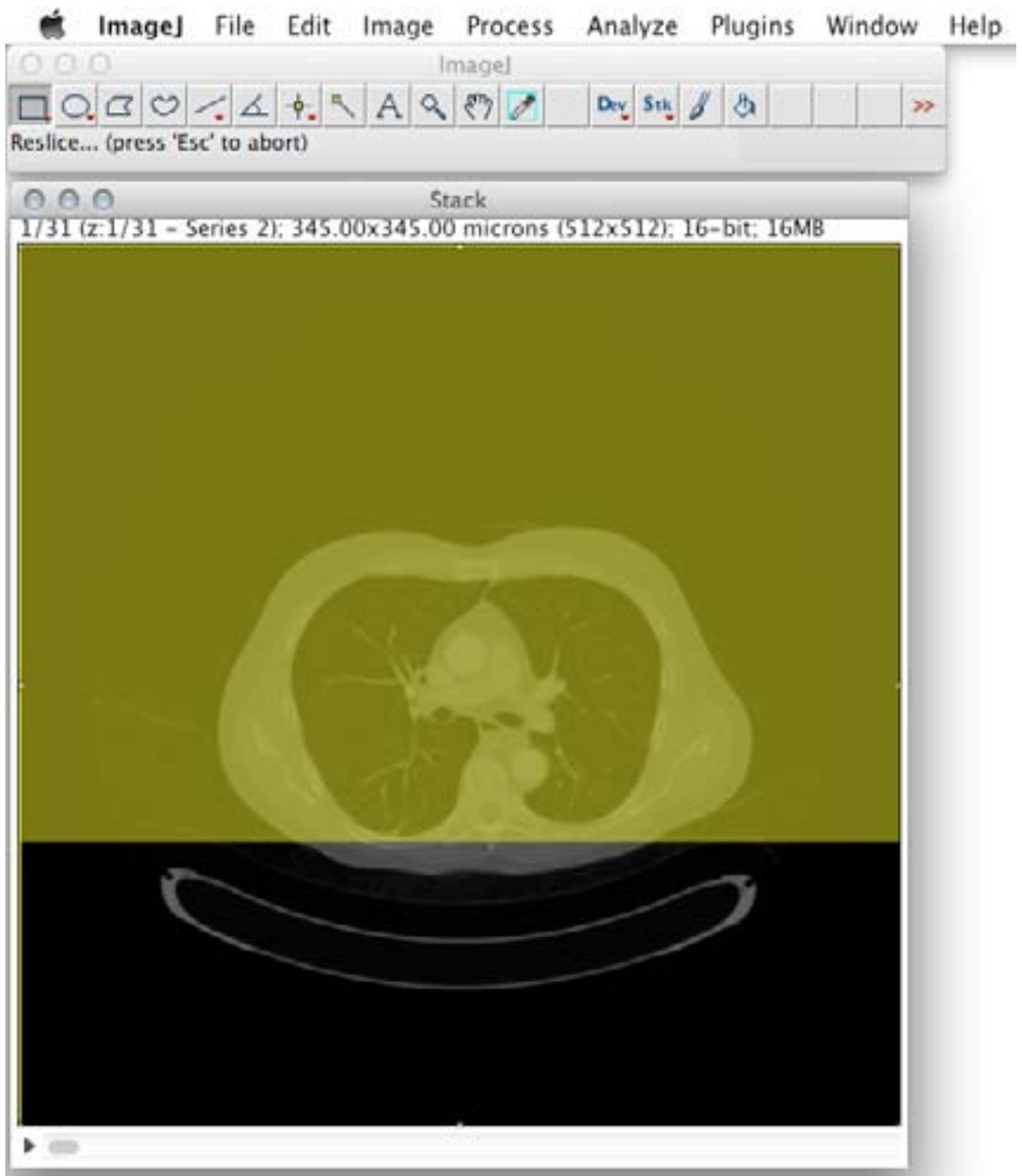
7 COLUNAS

5 LINHAS

25% AMPLIAÇÃO

STACKS

Reslice

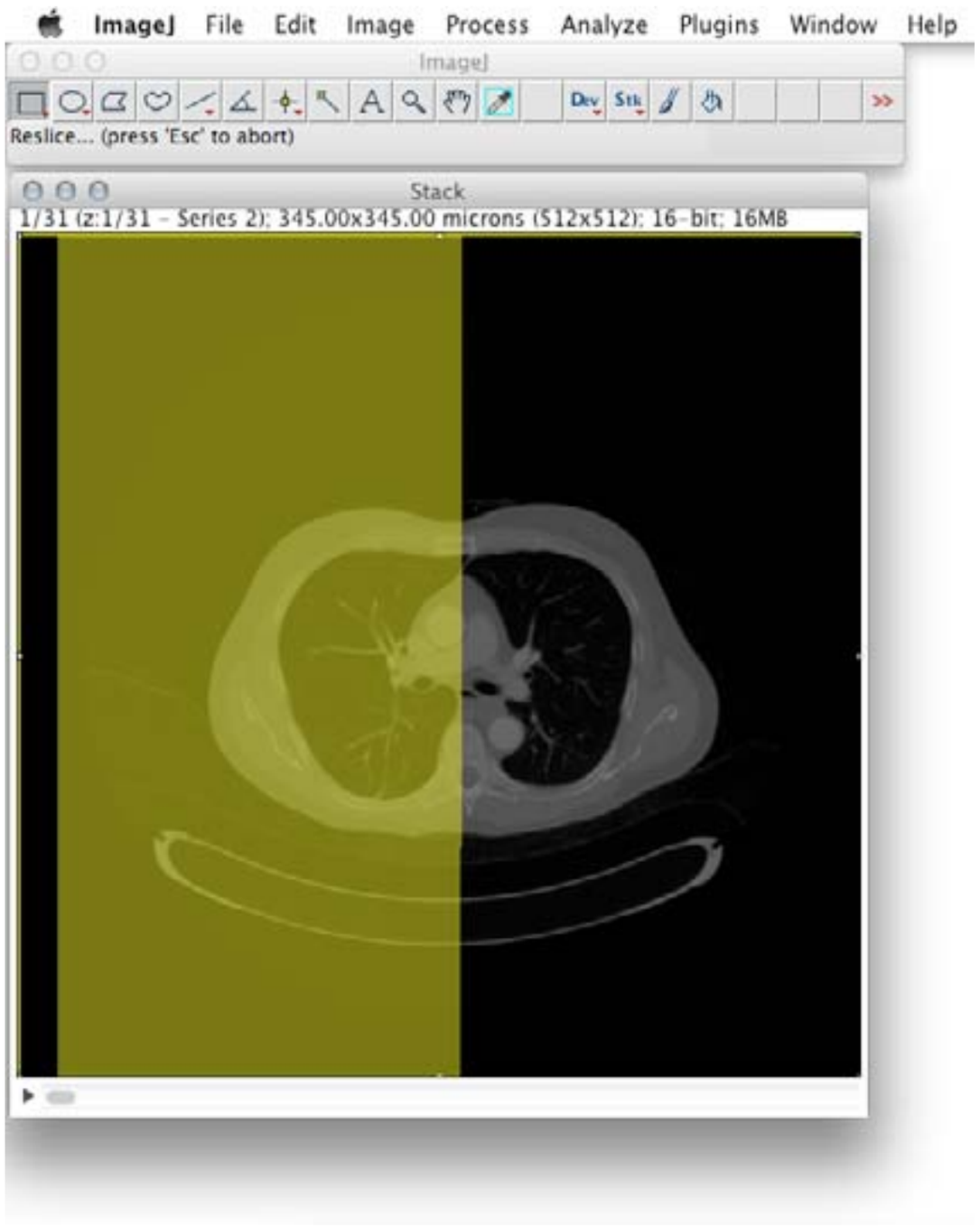


TOP

BOTTOM

STACKS

Reslice

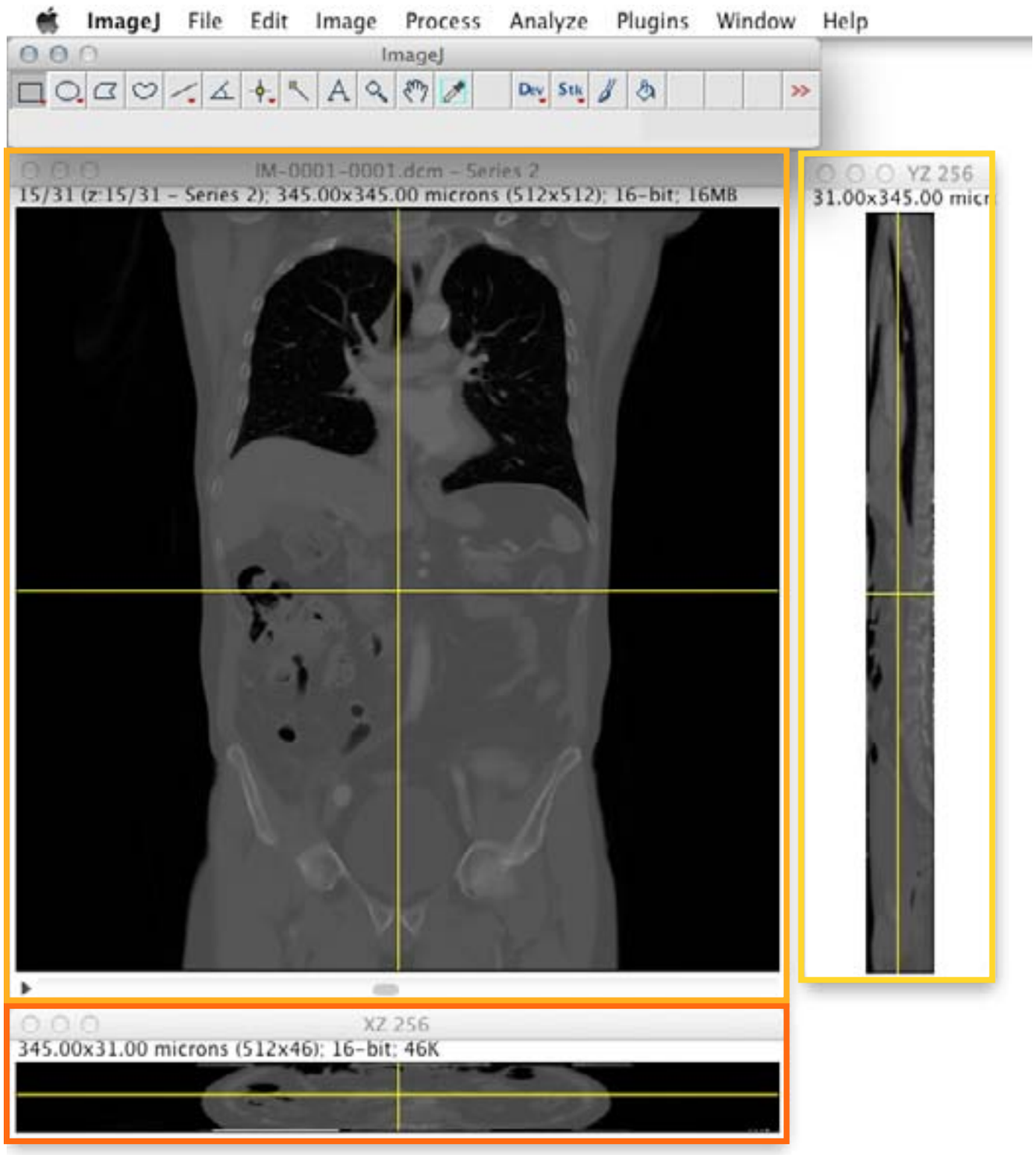


LEFT

RIGHT

STACKS

Orthogonal Views



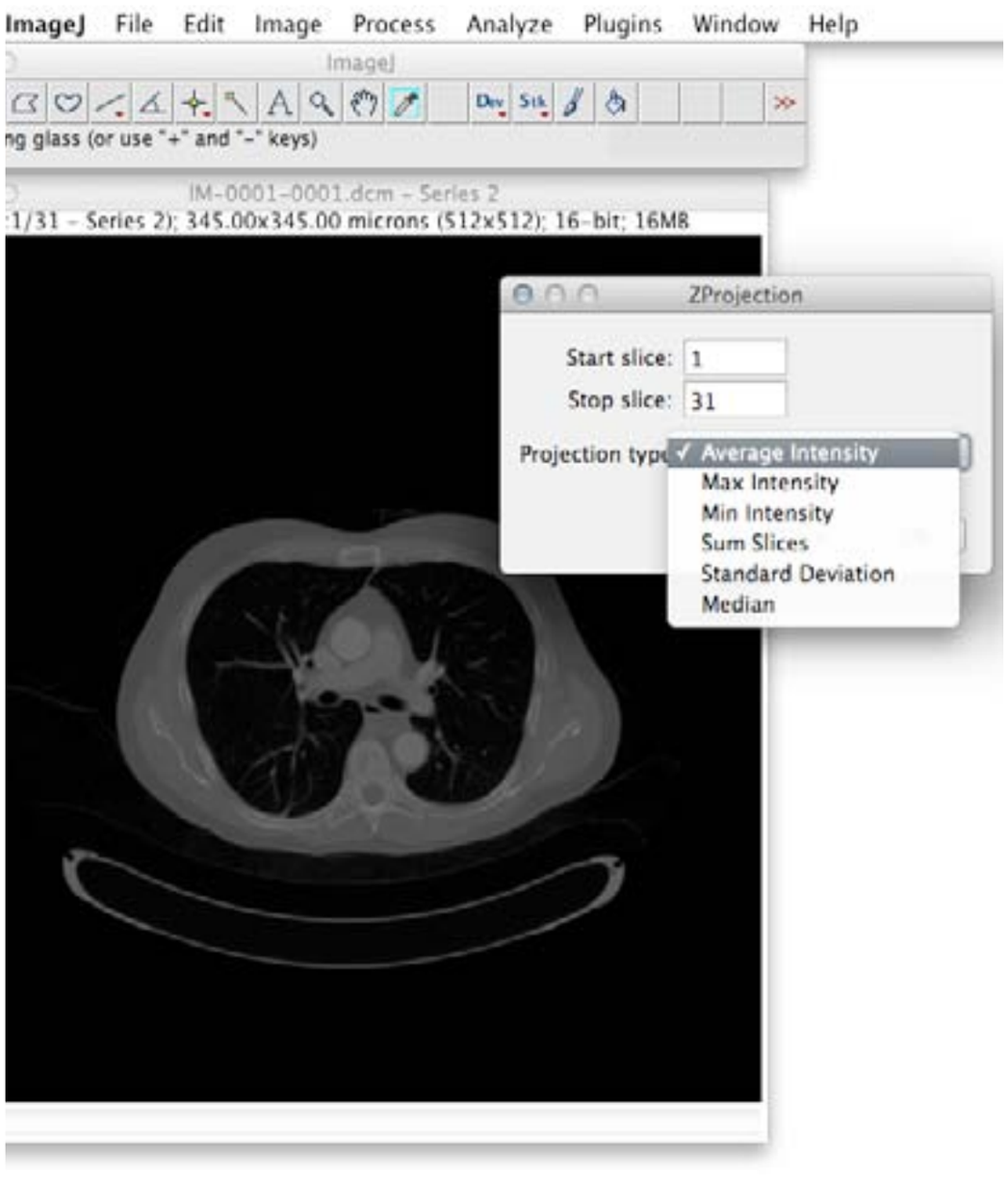
CORONAL

TRANSVERSAL

SAGITAL

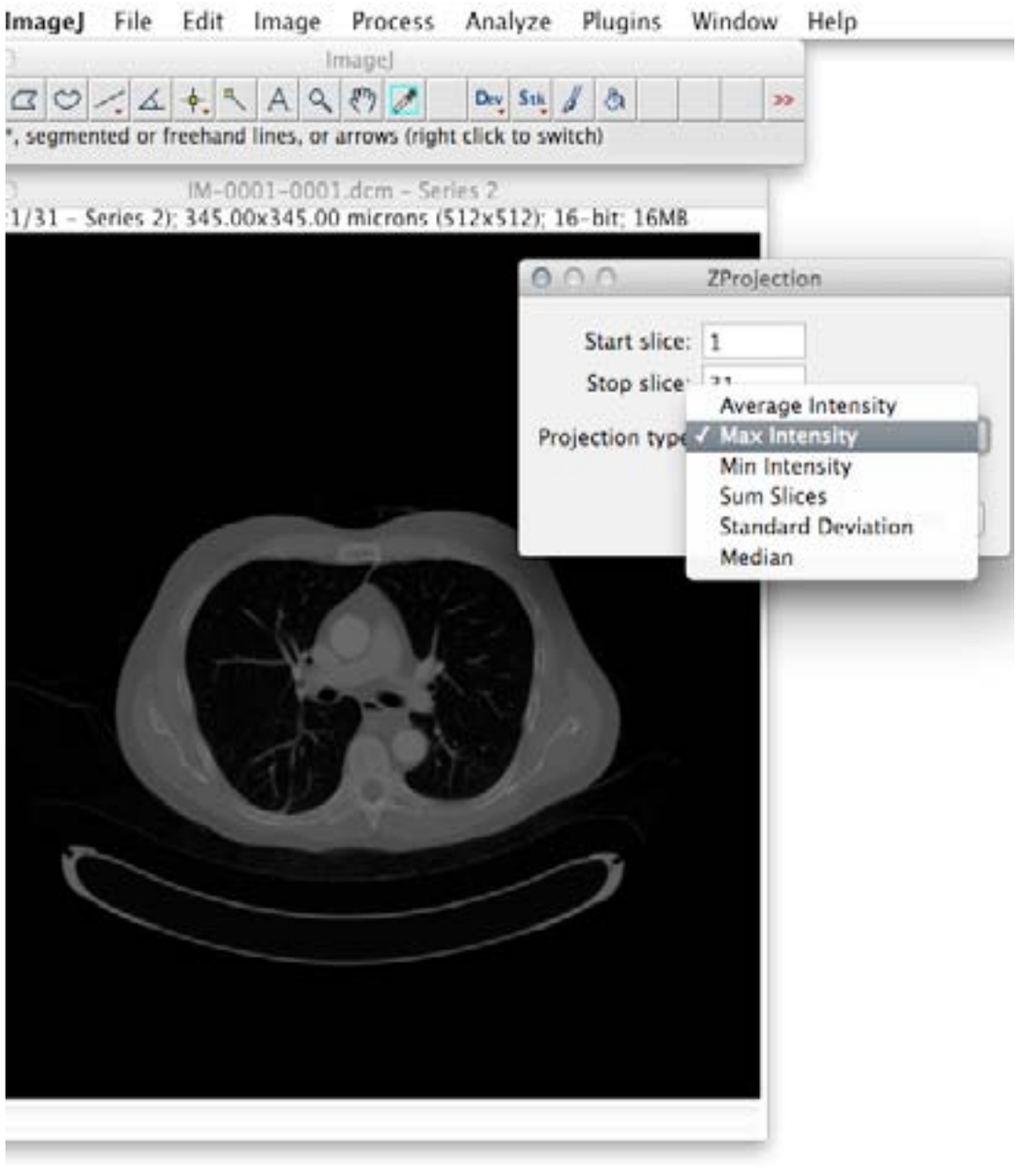
STACKS

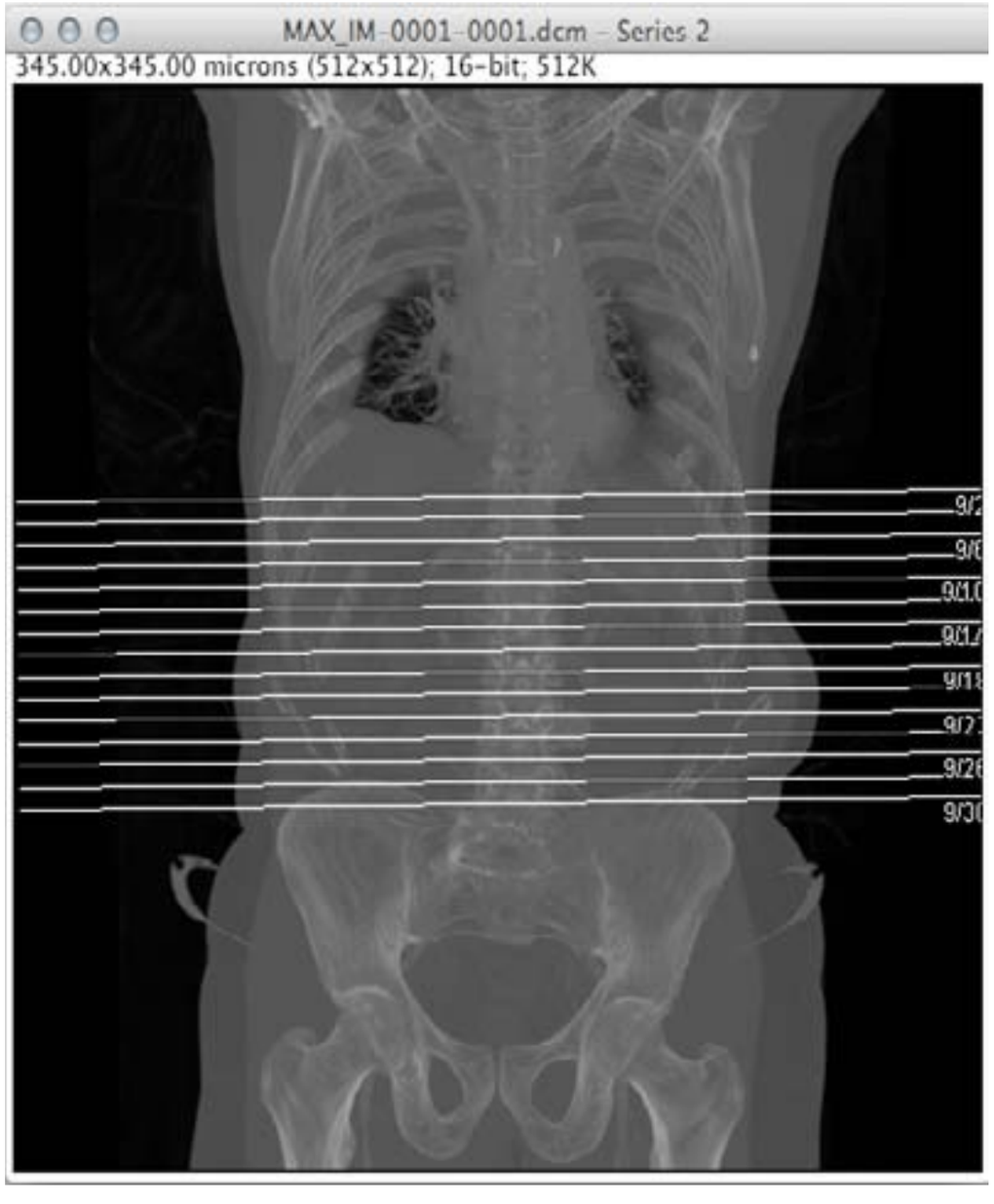
Z Project: Average Intensity



STACKS

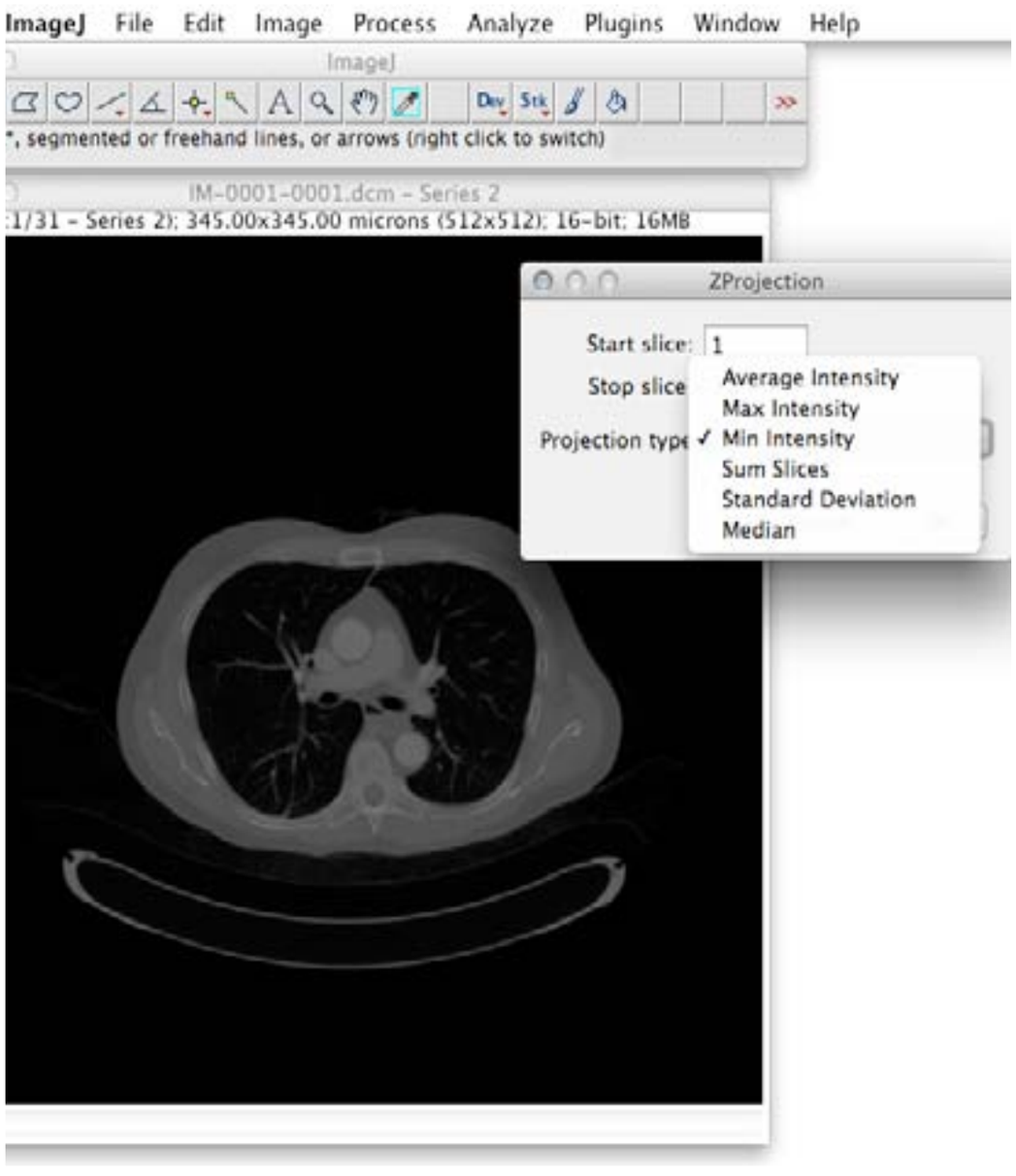
Z Project: Max Intensity





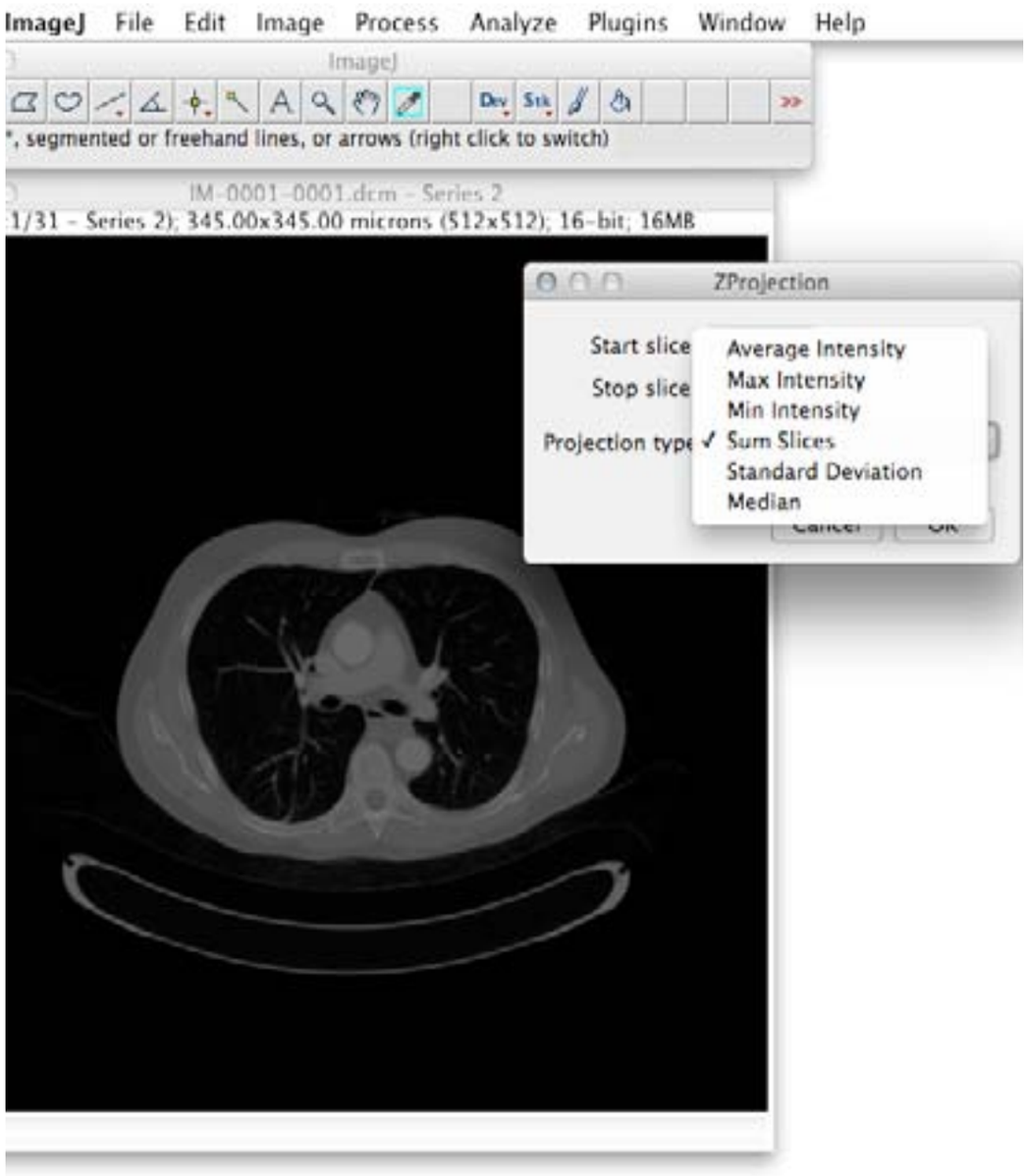
STACKS

Z Project: Min Intensity



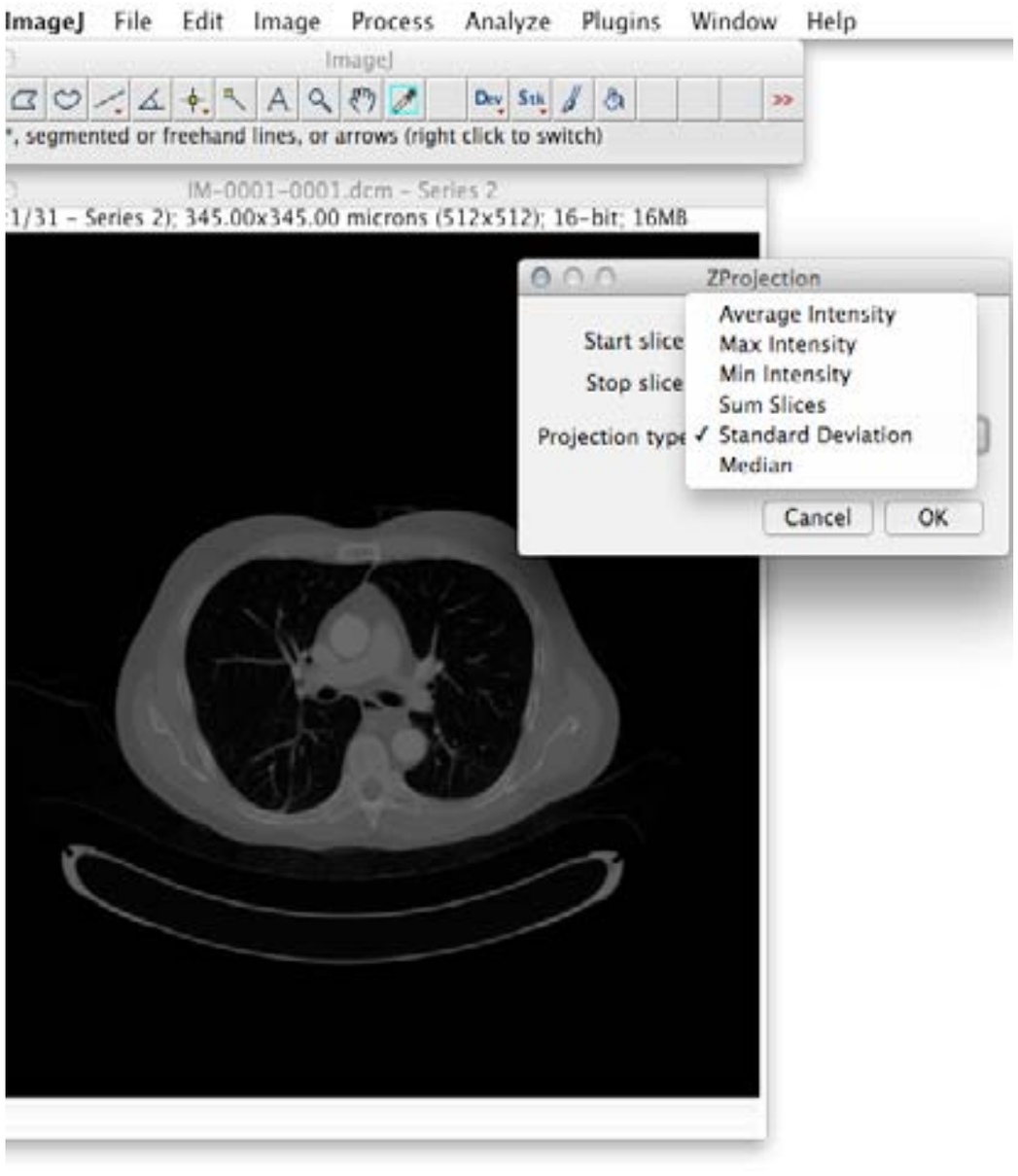
STACKS

Z Project: Sum Slices



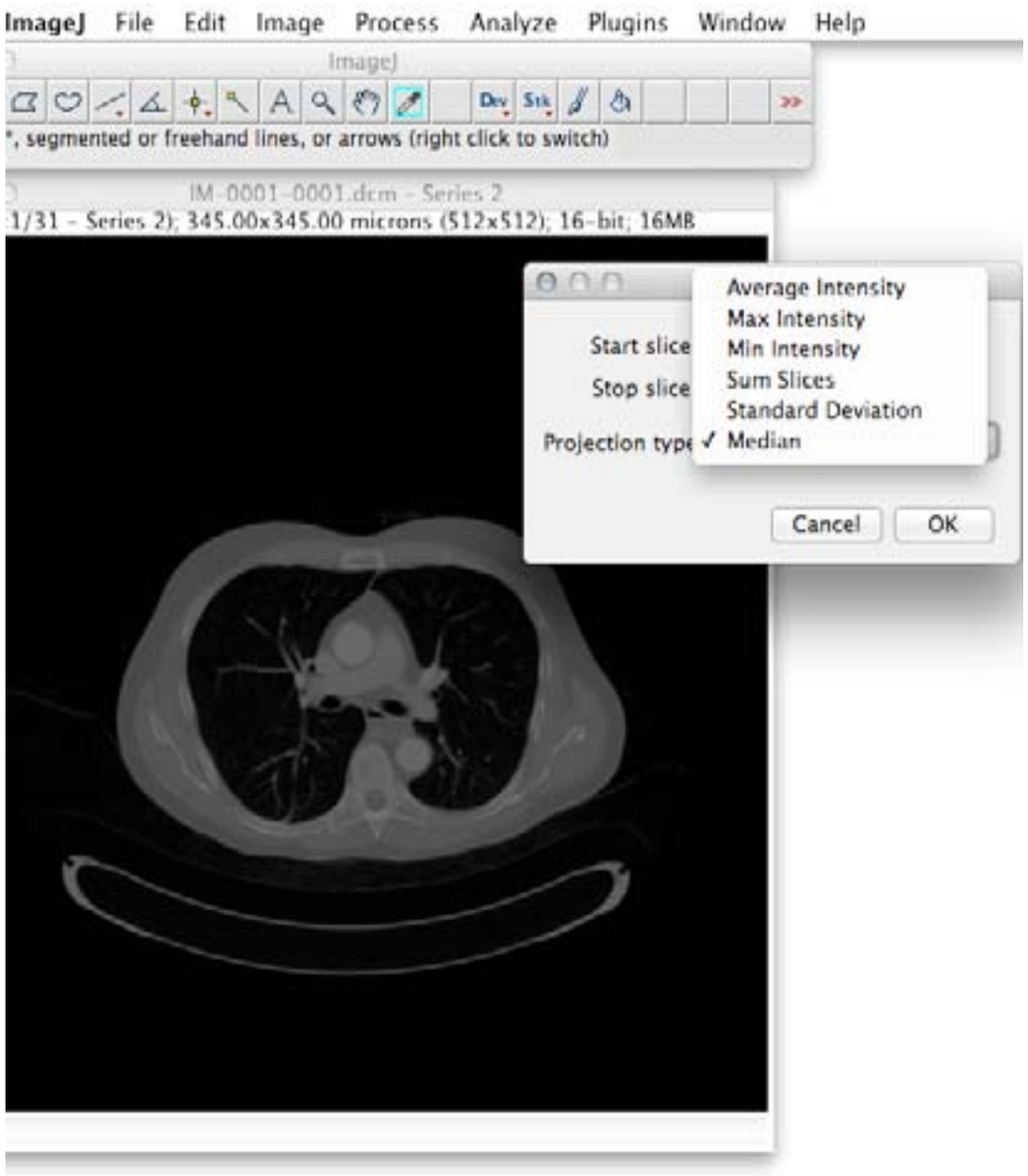
STACKS

Z Project: Standard Deviation



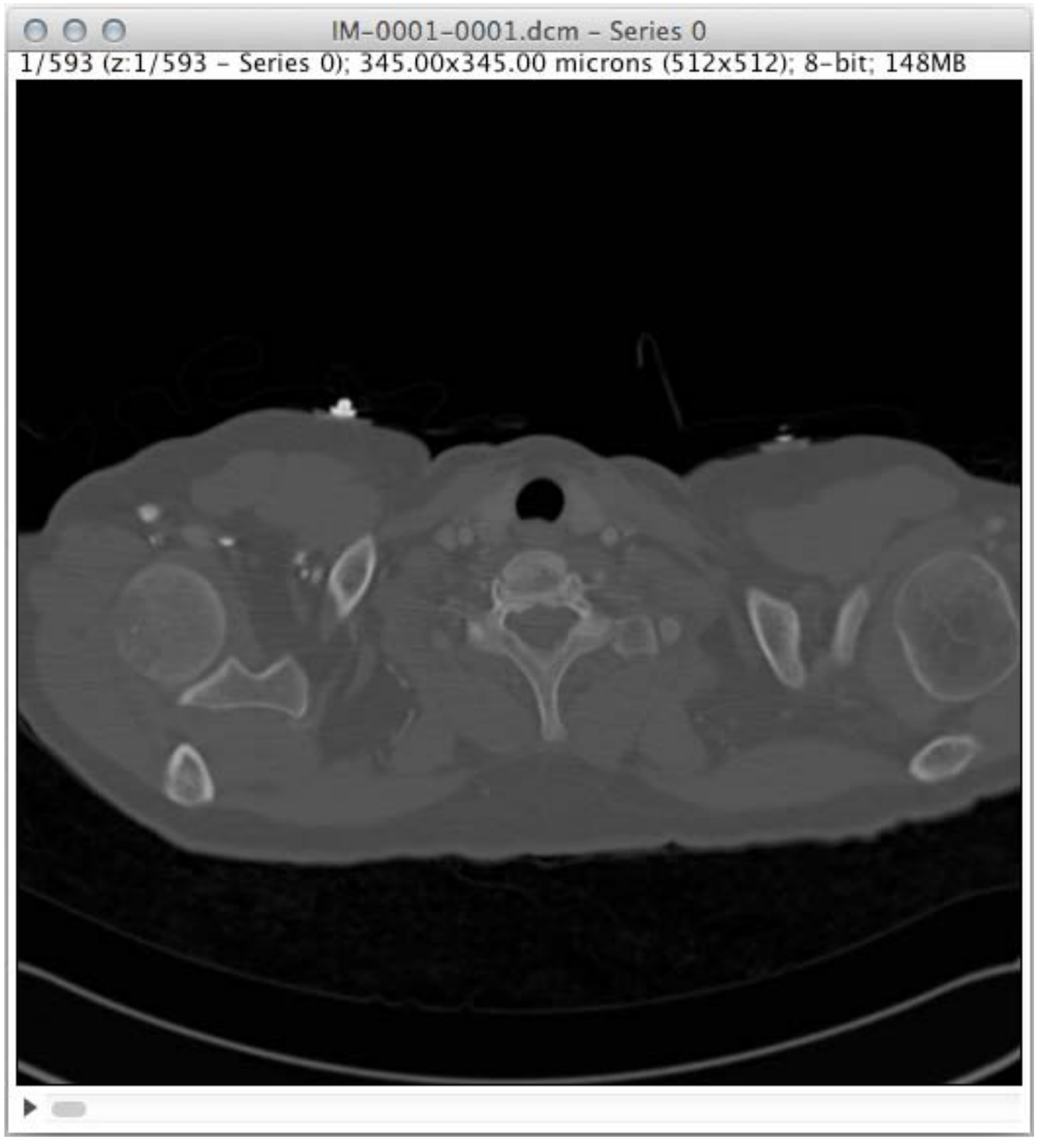
STACKS

Z Project: Median



STACKS

3D Project

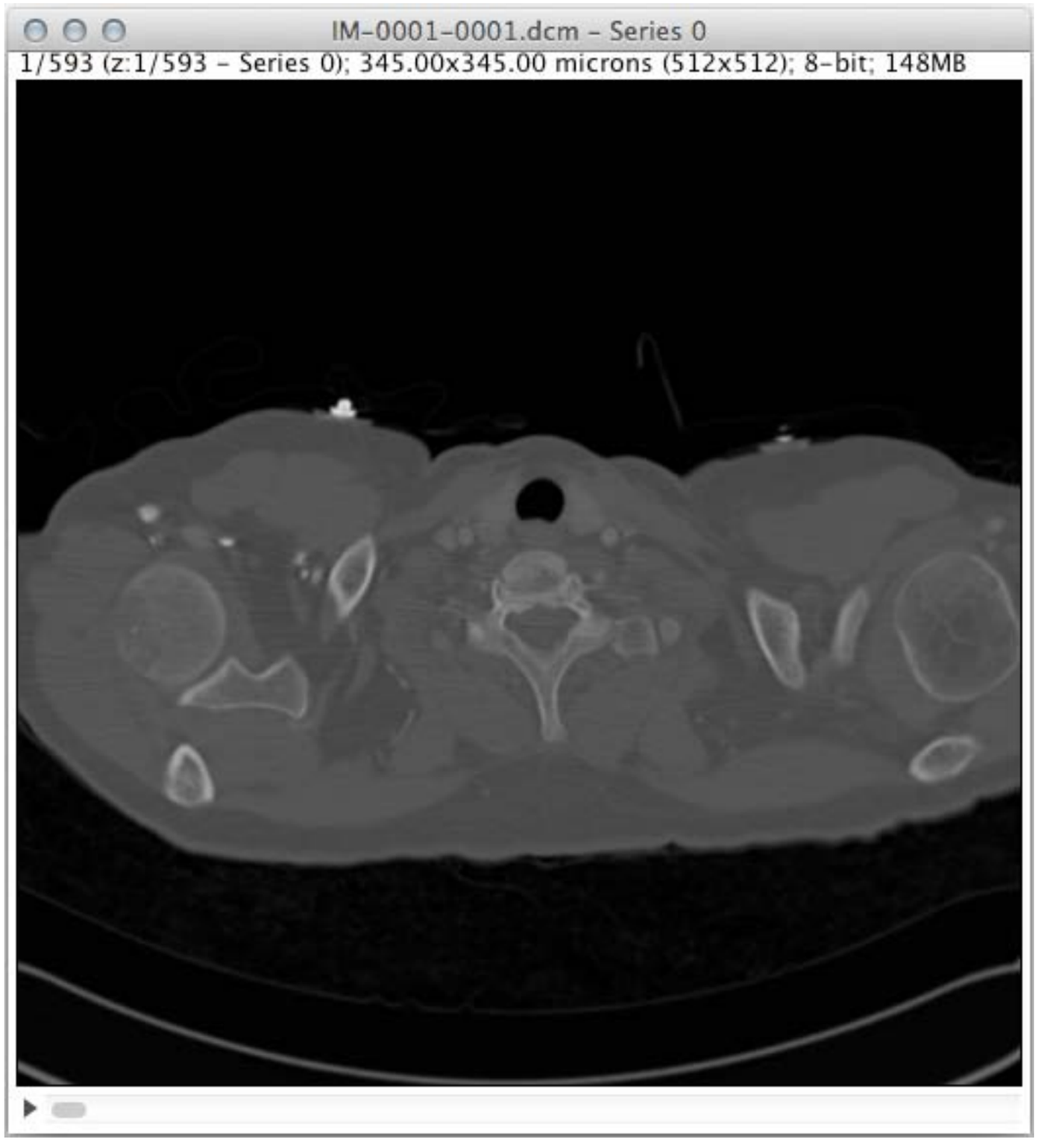


STACKS

3D Project

STACKS

3D Project



NEAREST POINT

BRIGHTEST POINT

MEAN VALUE

EIXO XX

EIXO YY

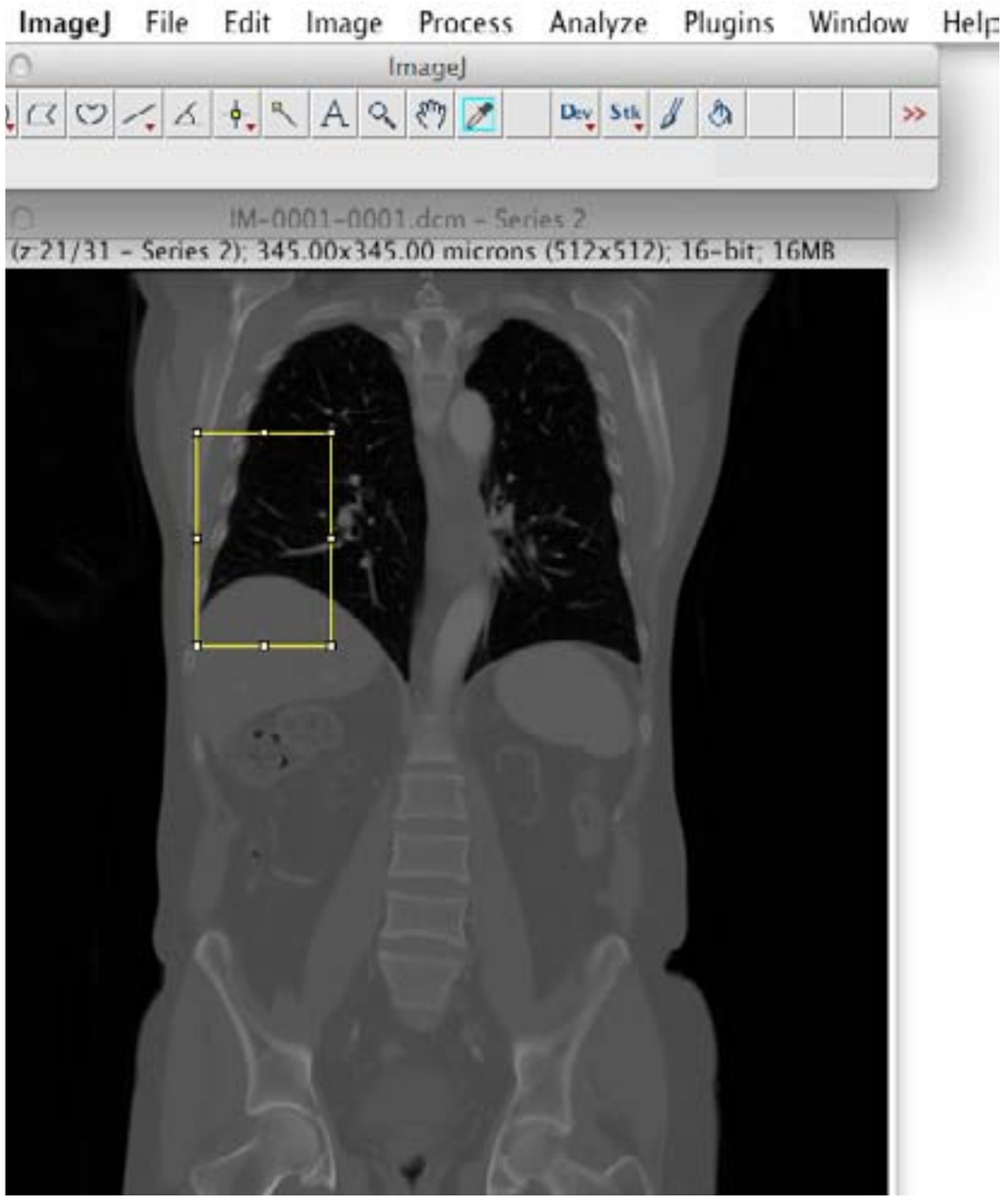
EIXO ZZ

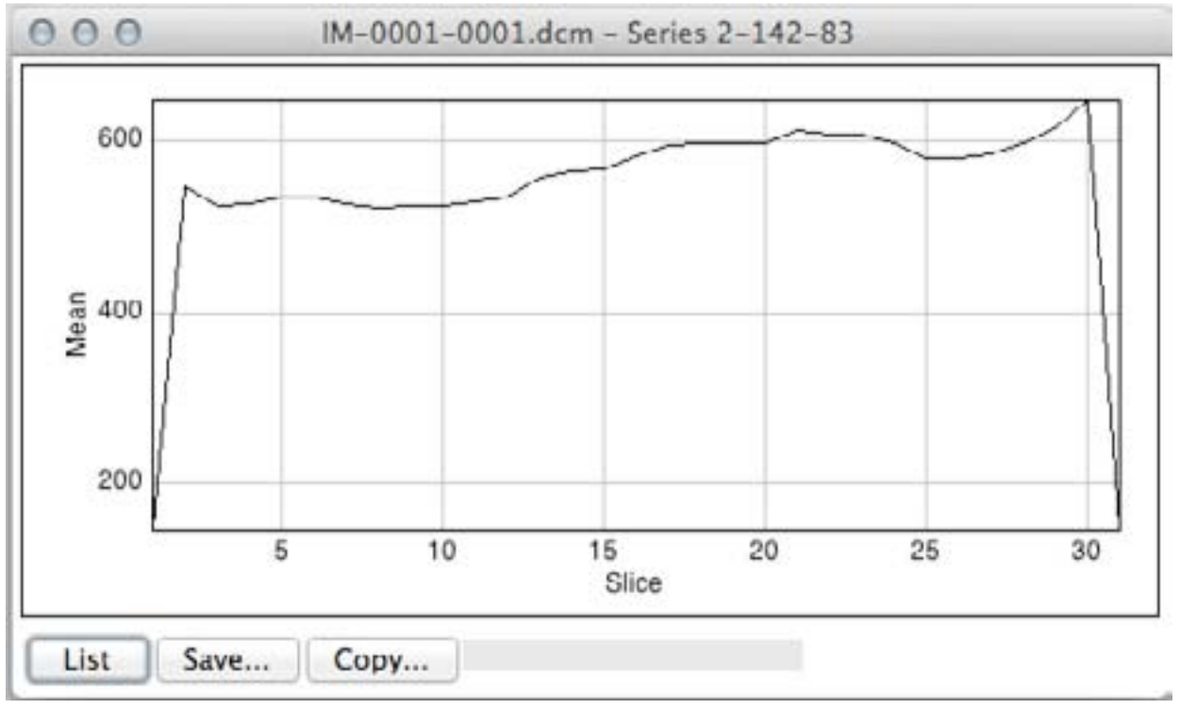
STACKS

3D Project

STACKS

Plot Z-Axis Profile



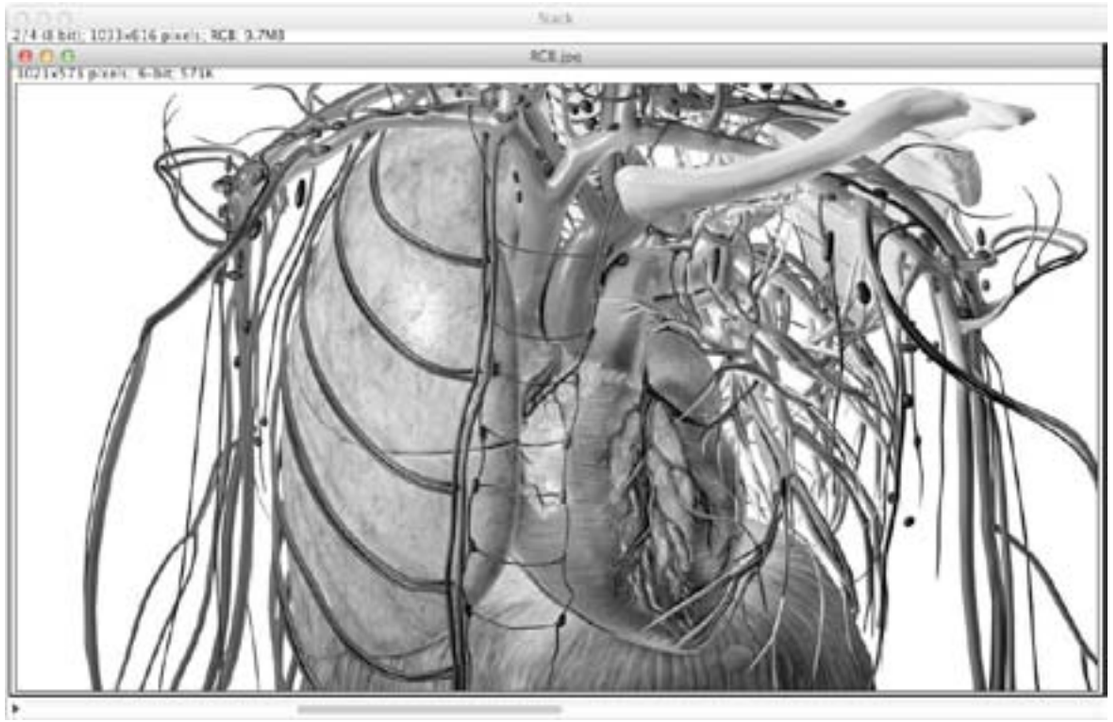


Results

	Area	Mean	Min	Max
22	3563.340	610.589	76	1701
23	3563.340	609.391	86	1834
24	3563.340	598.799	87	1754
25	3563.340	582.173	81	1760
26	3563.340	581.578	73	1728
27	3563.340	587.052	78	1871
28	3563.340	600.759	83	1706
29	3563.340	616.782	28	1634
30	3563.340	648.980	19	1604
31	3563.340	145.920	4	1167

STACKS

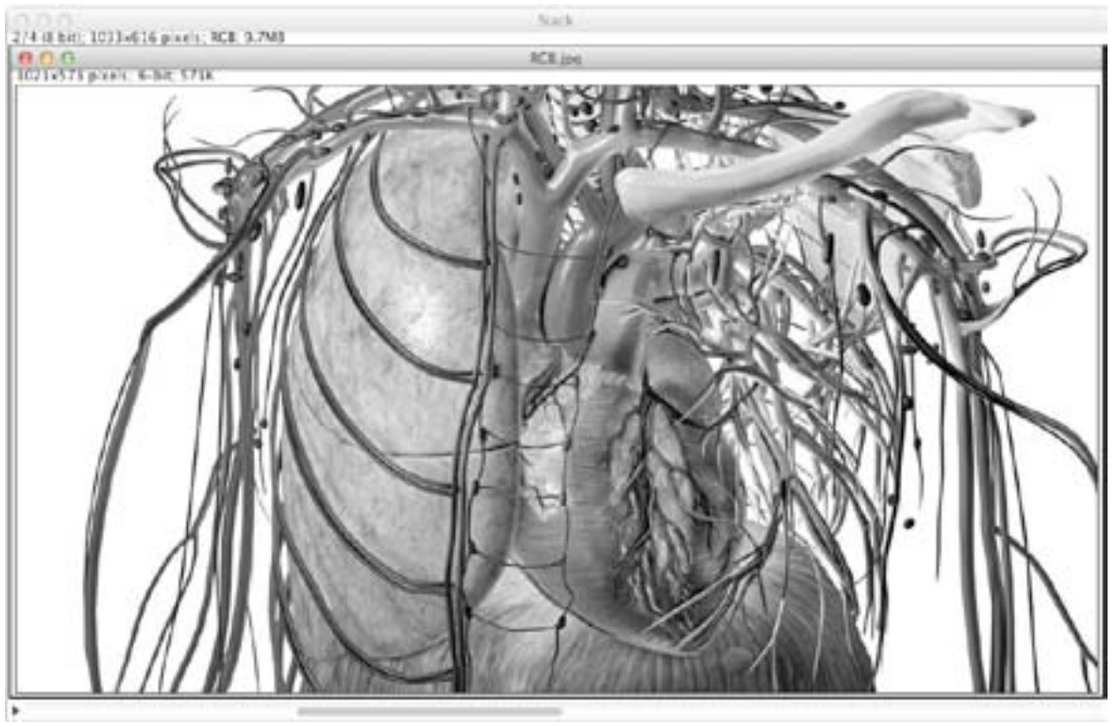
Label



STACK

STACKS

Label



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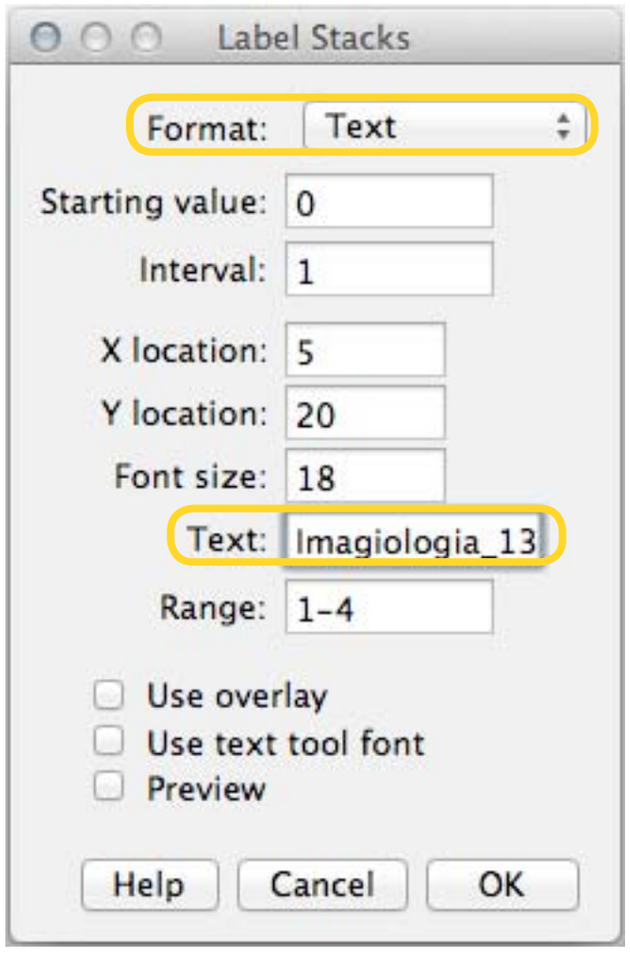
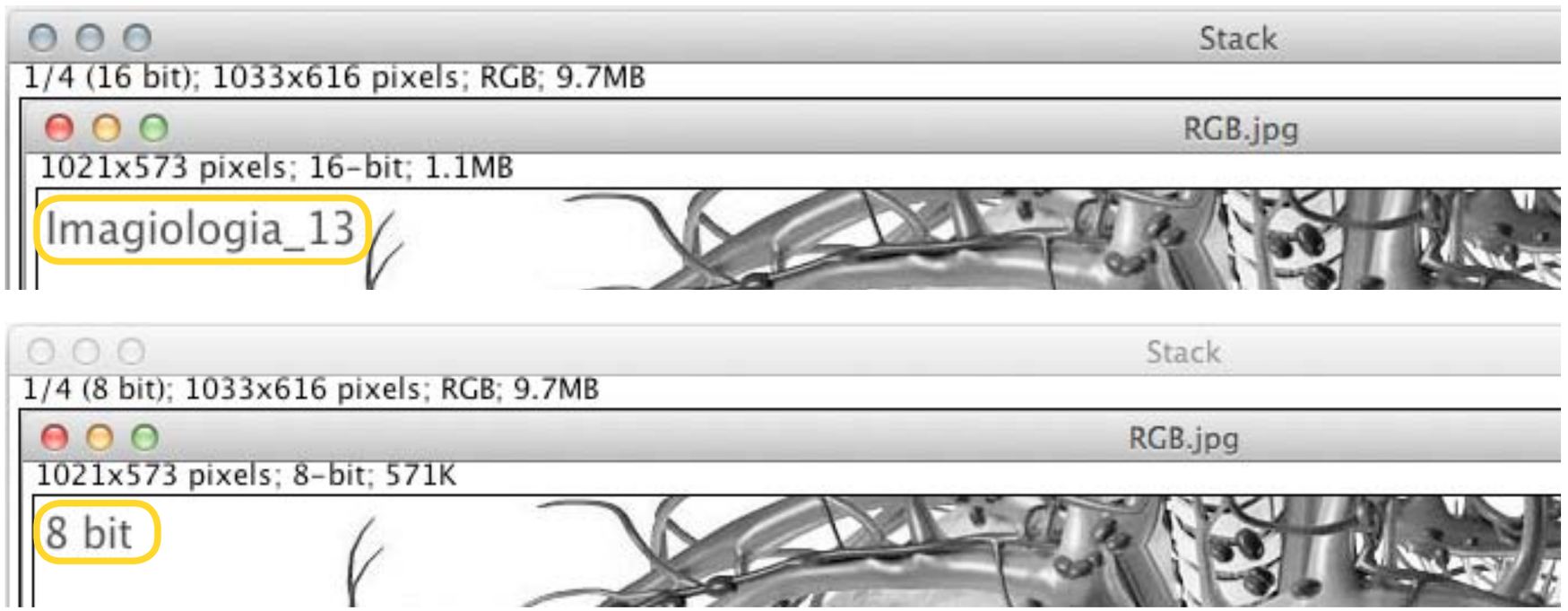


STACKS

Label



TEXT

LABEL

0000

00:00:00

STACKS

Tools: Combine

STACKS

Tools: Combine

STACKS

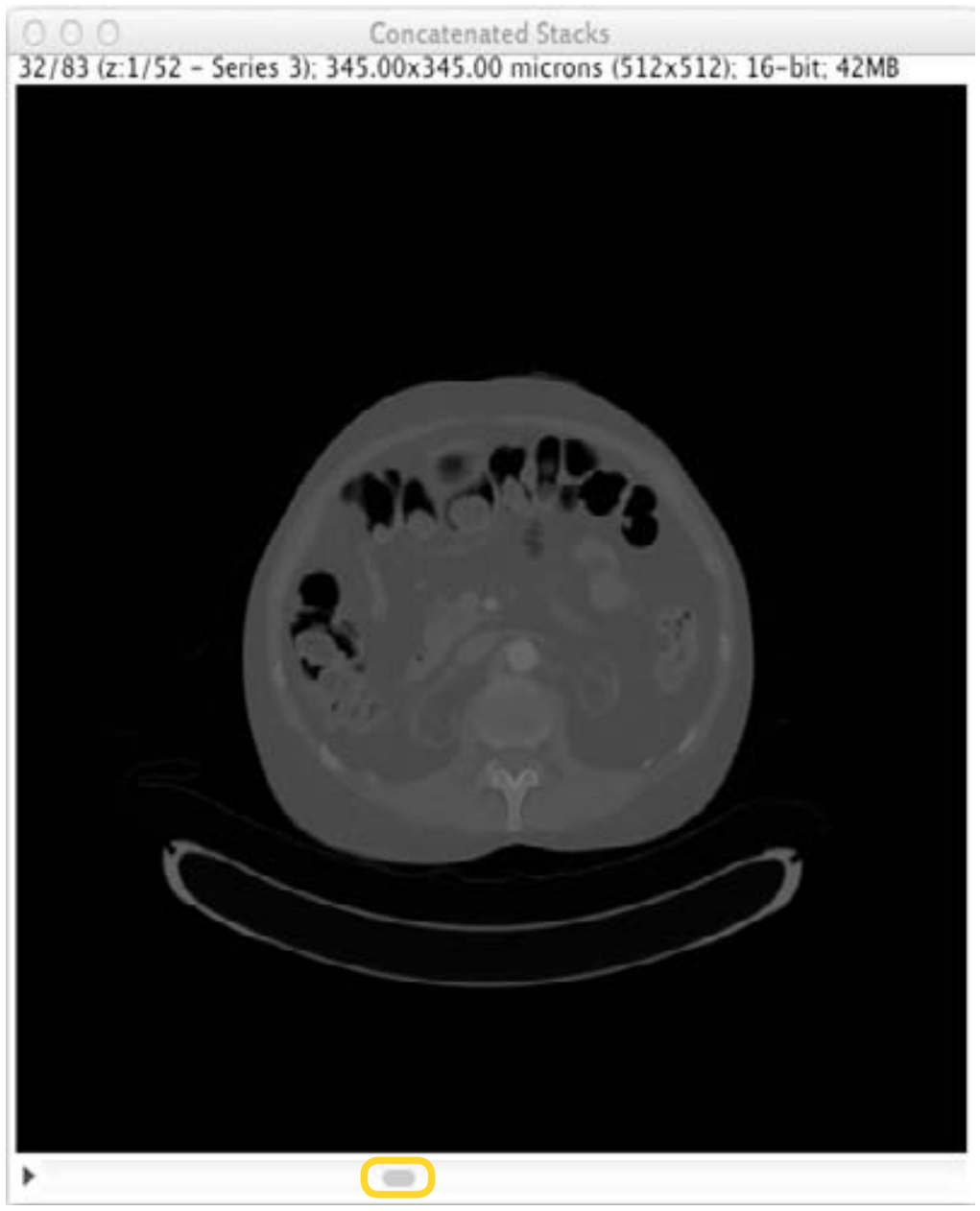
Tools: Concatenate

STACKS

Tools: Concatenate

STACKS

Tools: Concatenate



STACKS

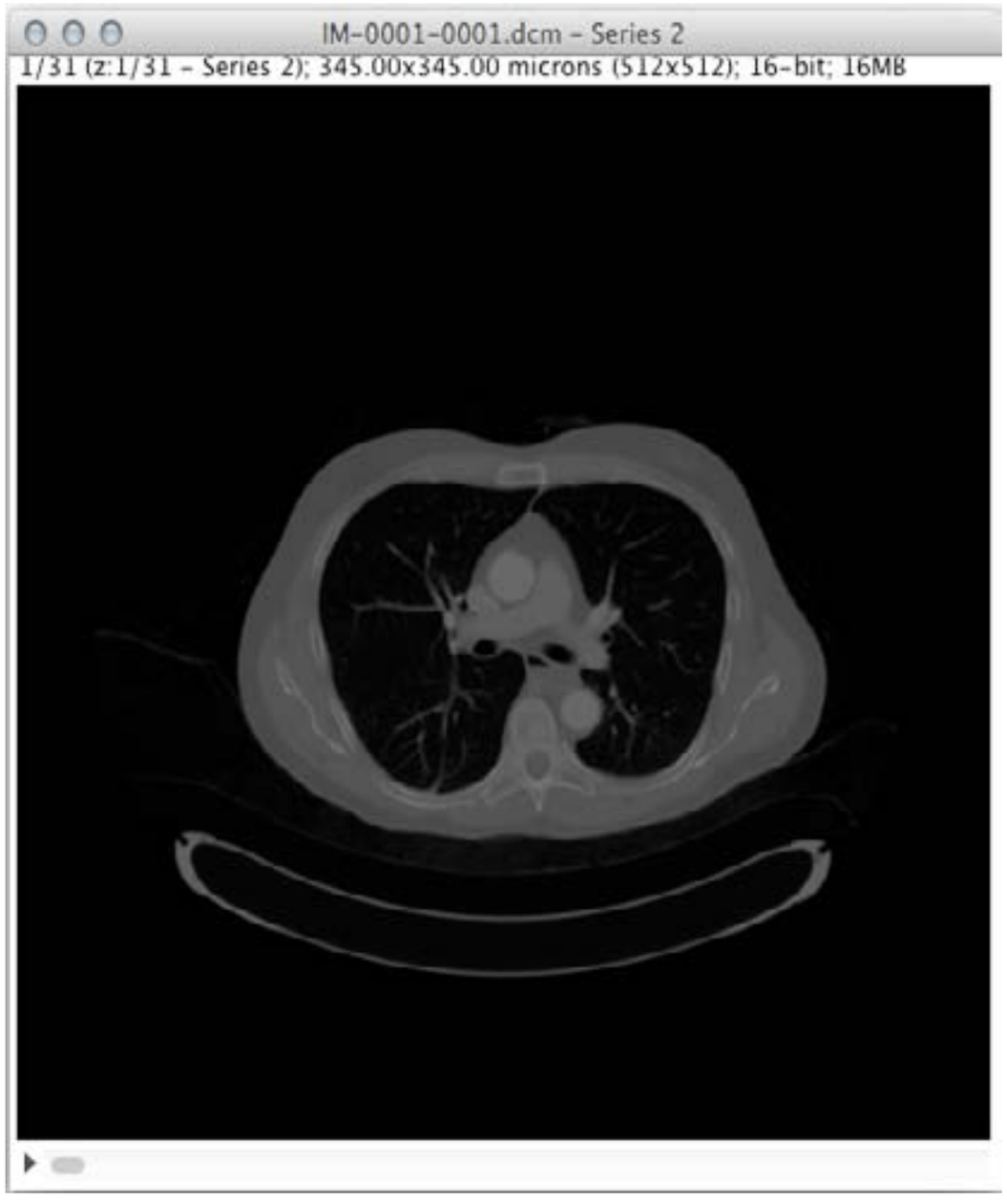
Tools: Reduce

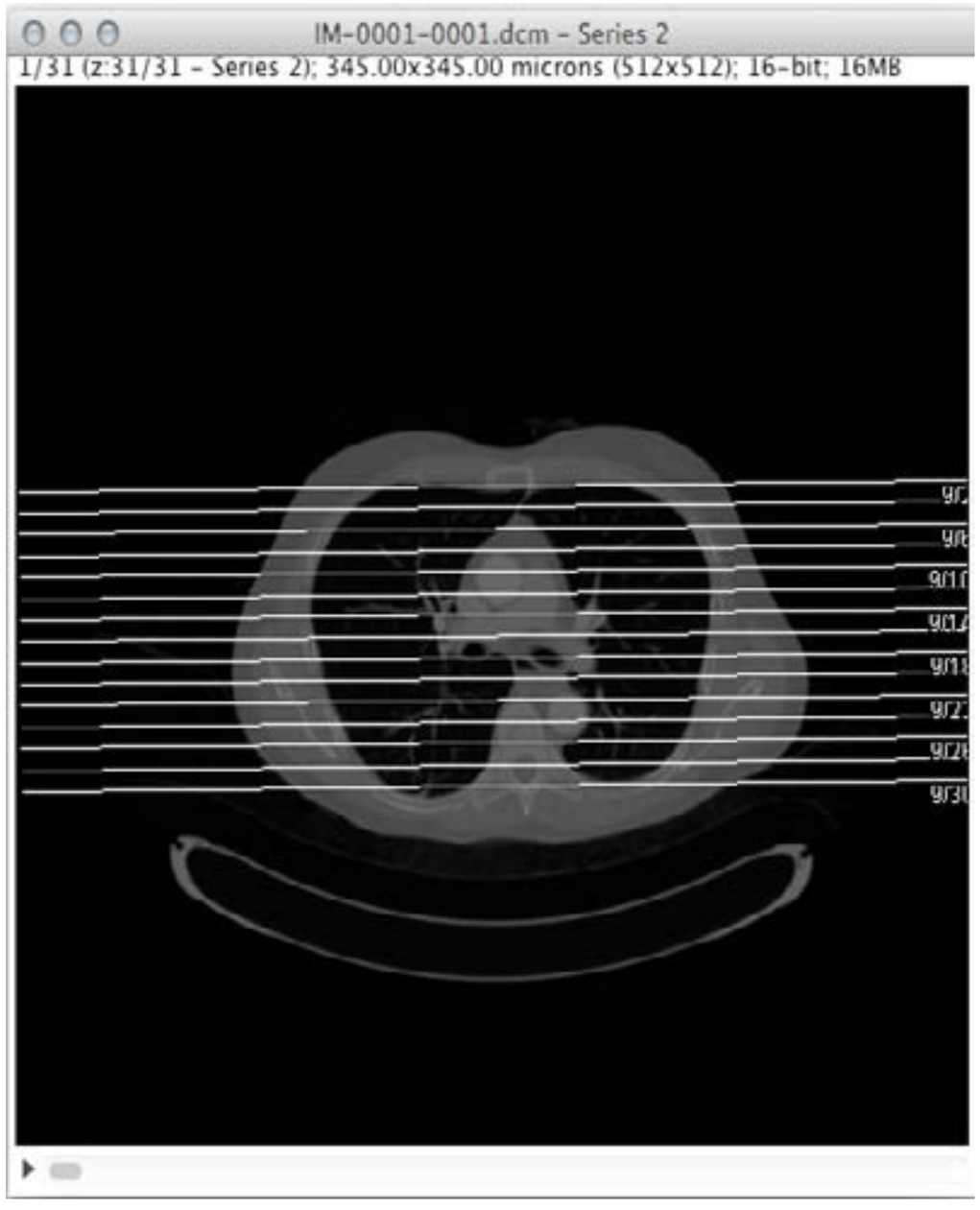
32 Slices

8 Slices

STACKS

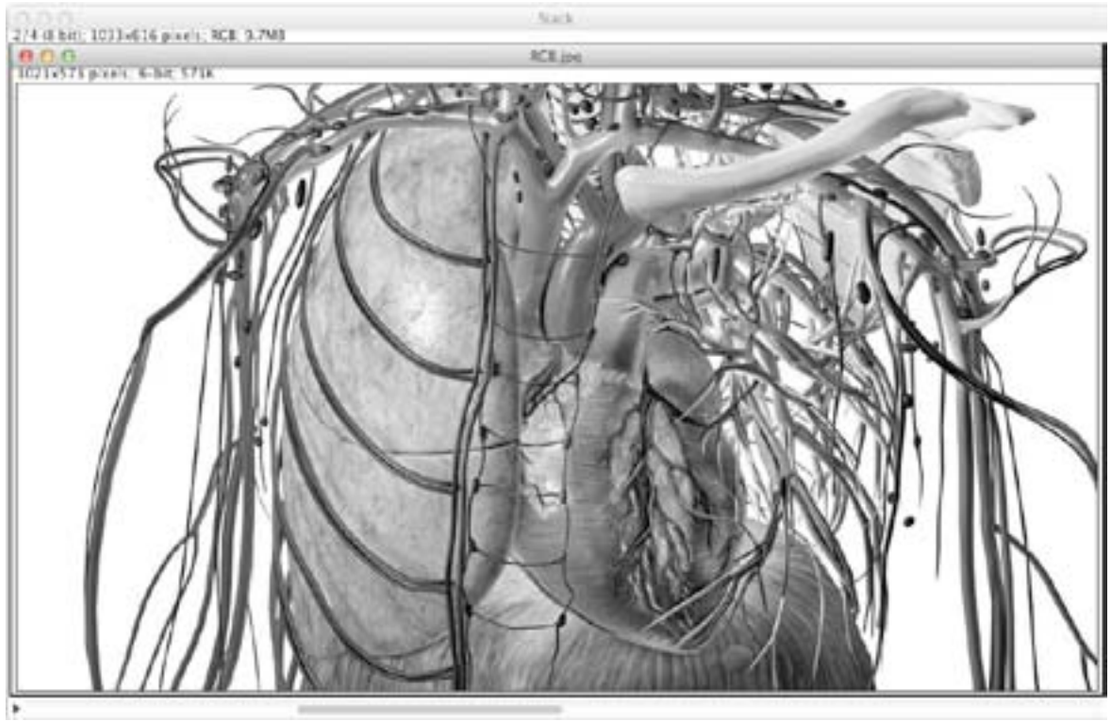
Tools: Reverse

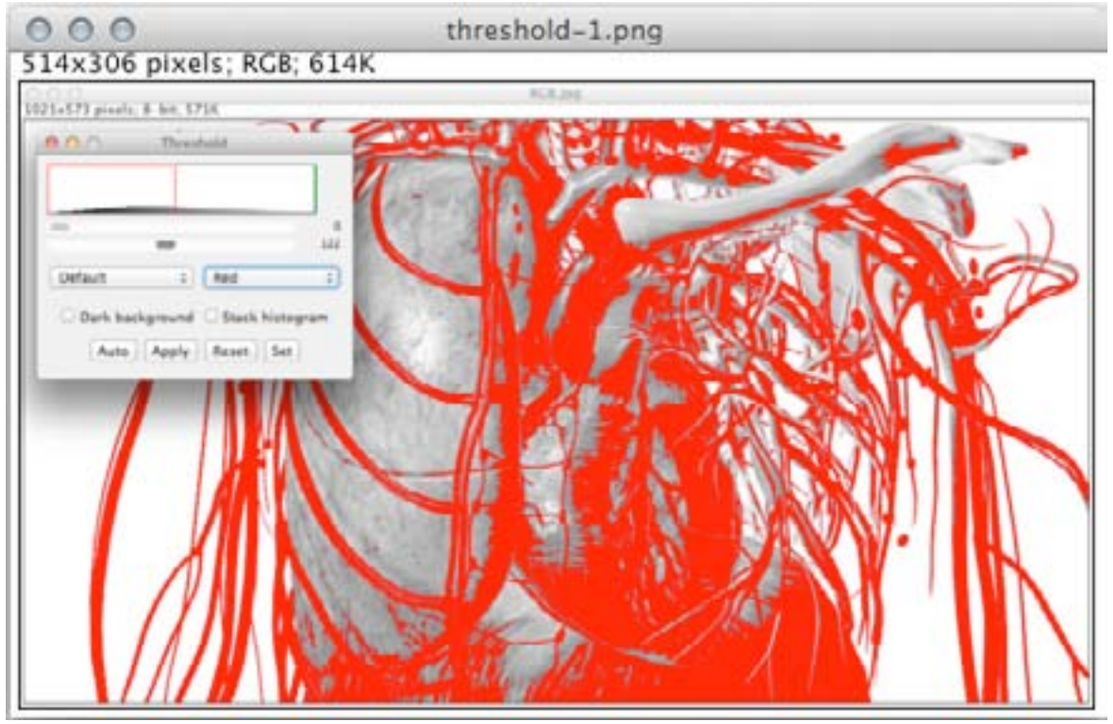




STACKS

Tools: Insert





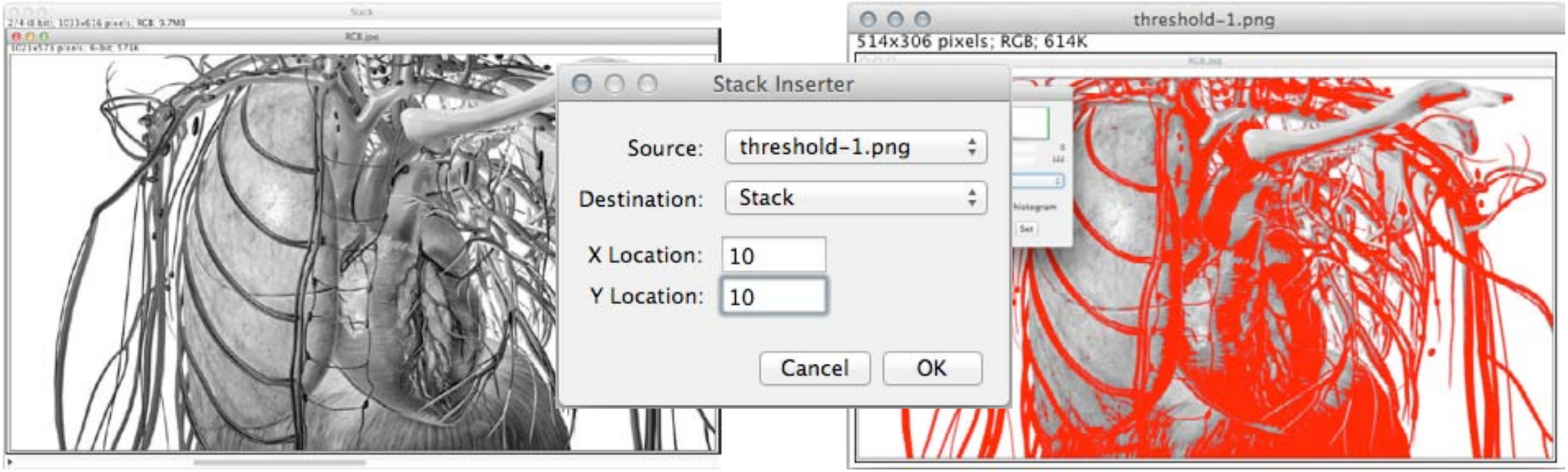
STACK

IMAGEM

MESMO TIPO

STACKS

Tools: Insert

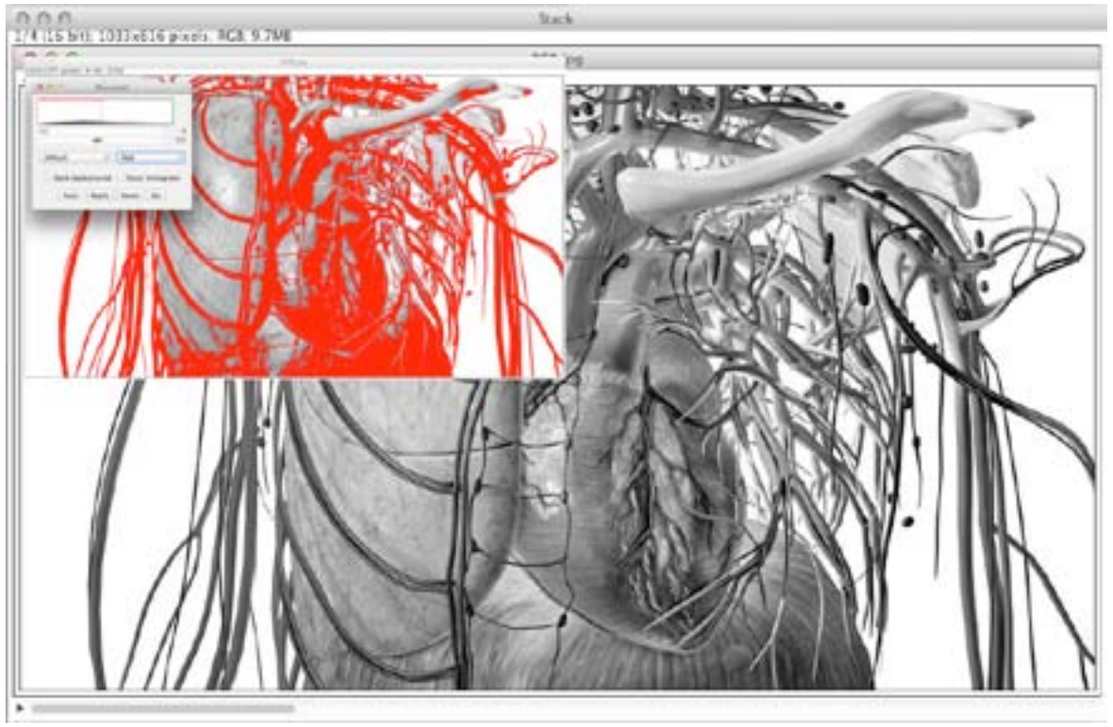


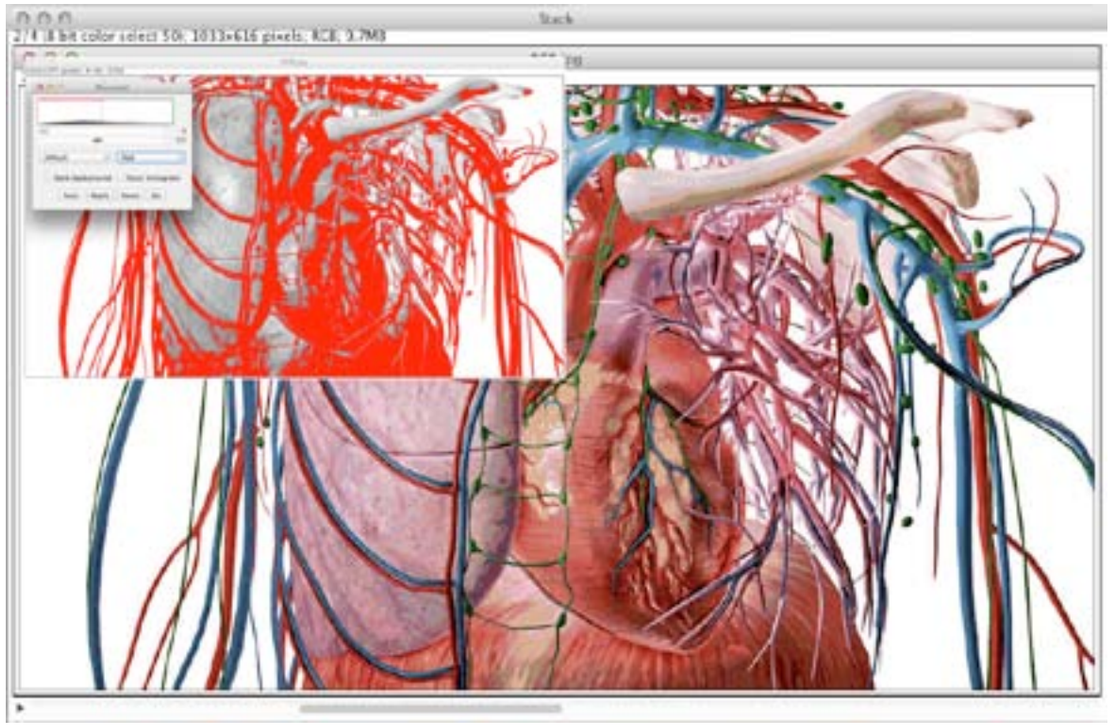
STACK

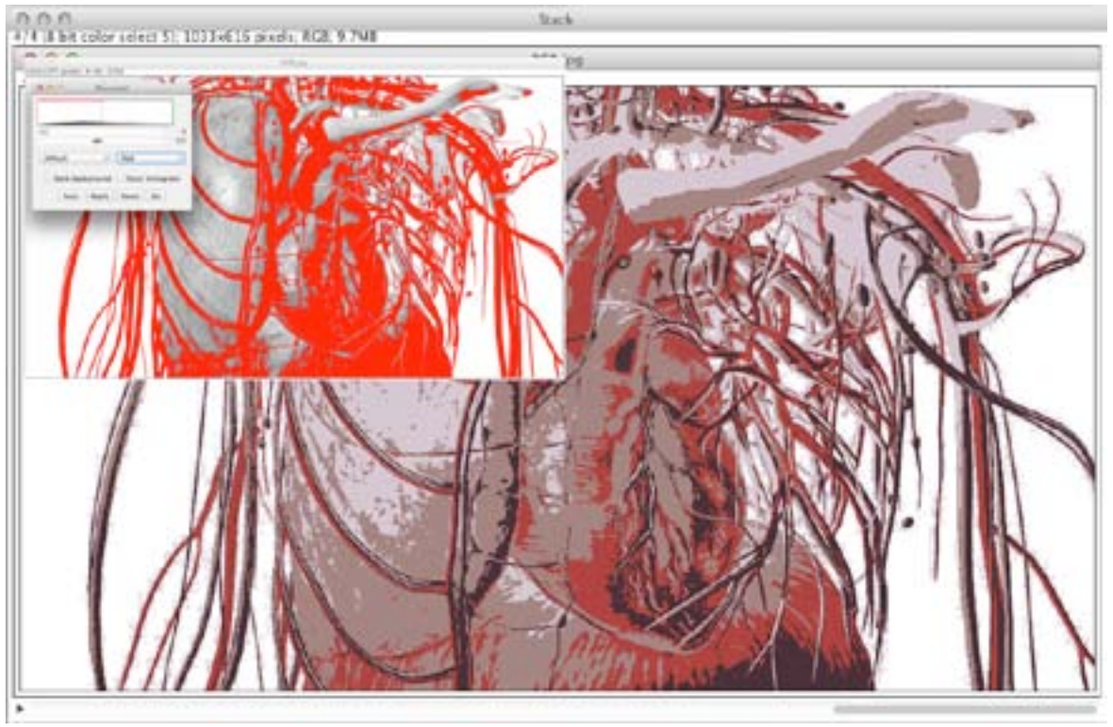
IMAGEM

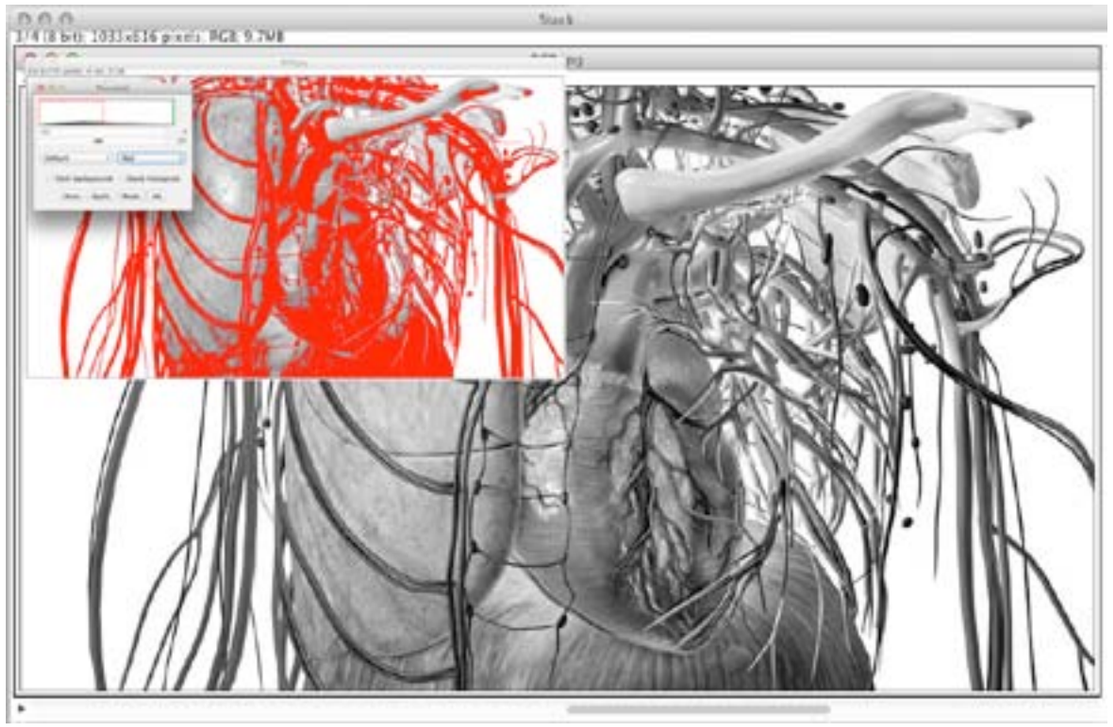
STACKS

Tools: Insert



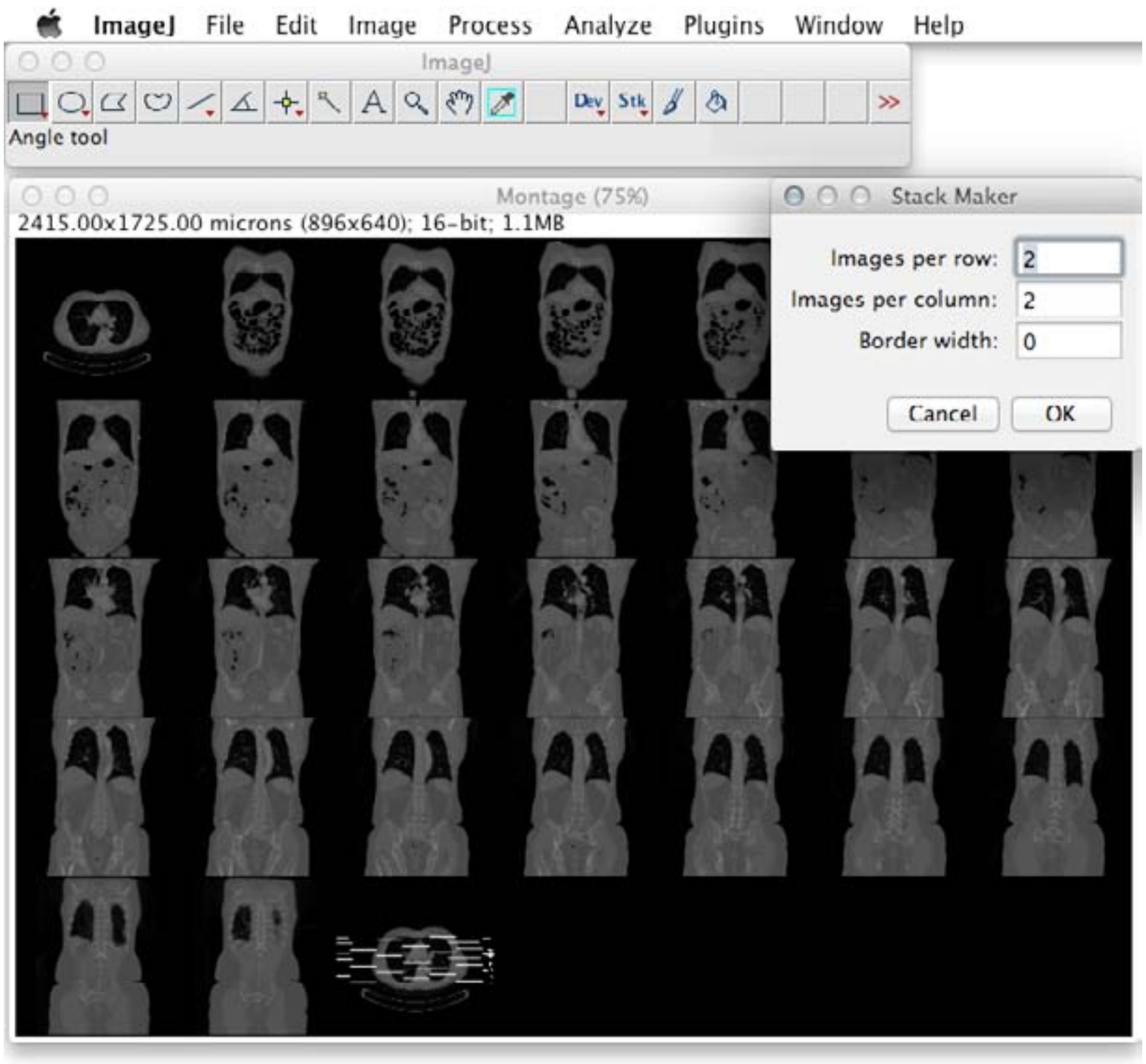






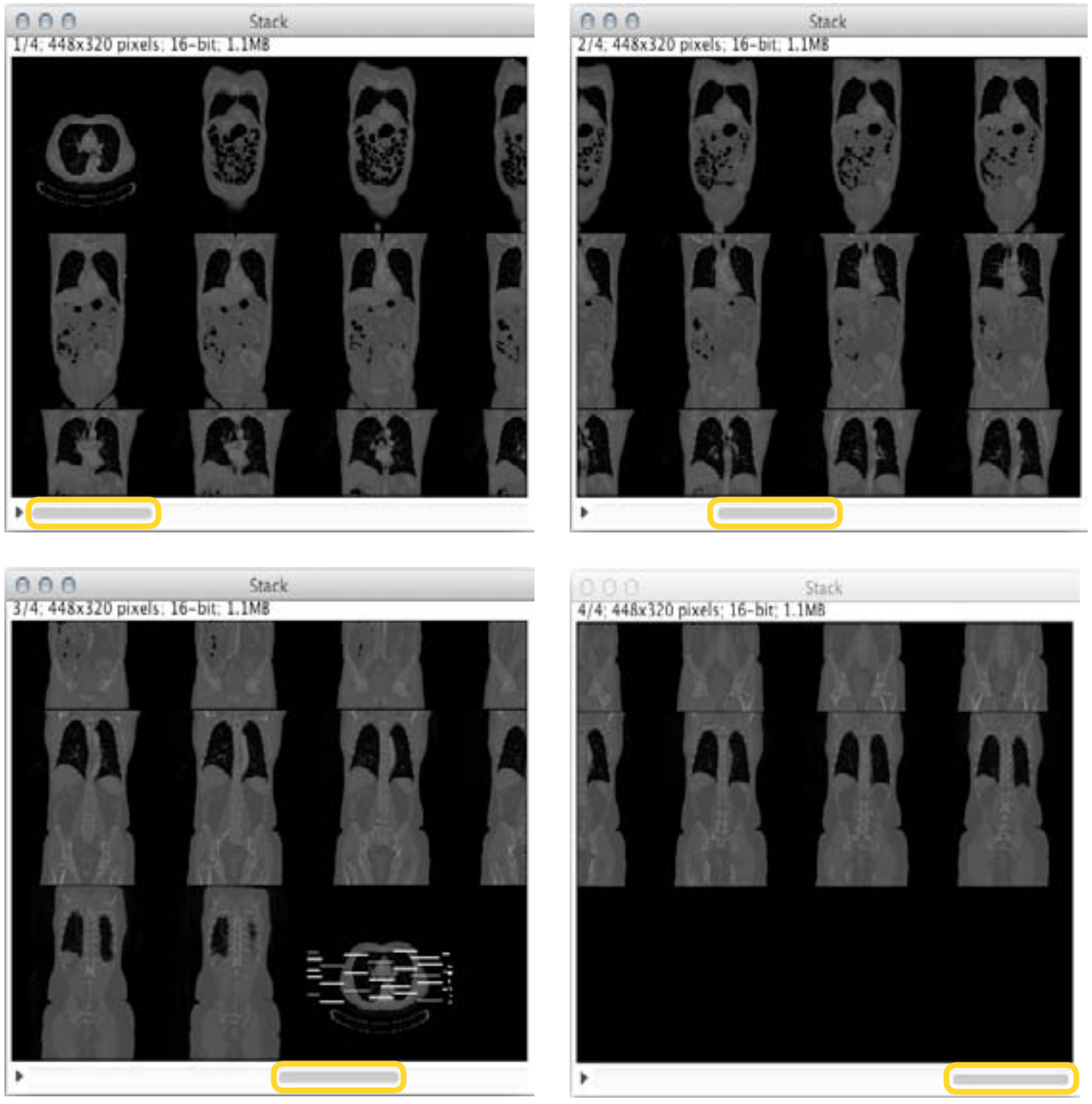
STACKS

Tools: Montage to Stack



STACKS

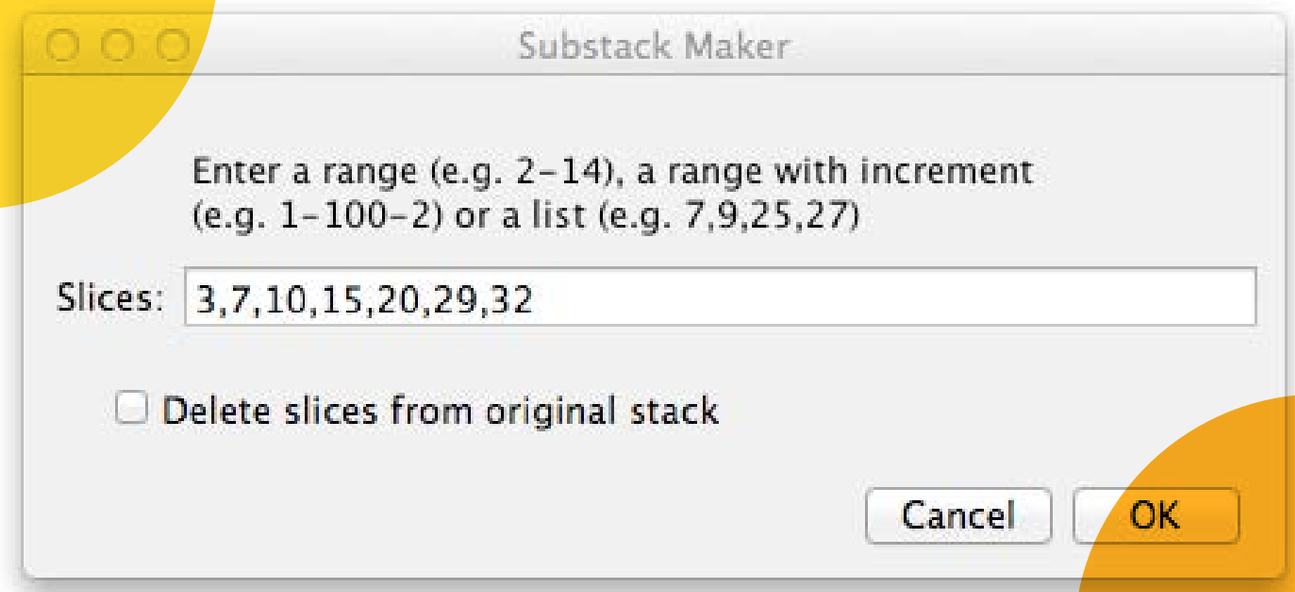
Tools: Montage to Stack



STACKS

Tools: Make Substack

STACK



SUBSTACK

STACKS

Tools: Grouped Z Project

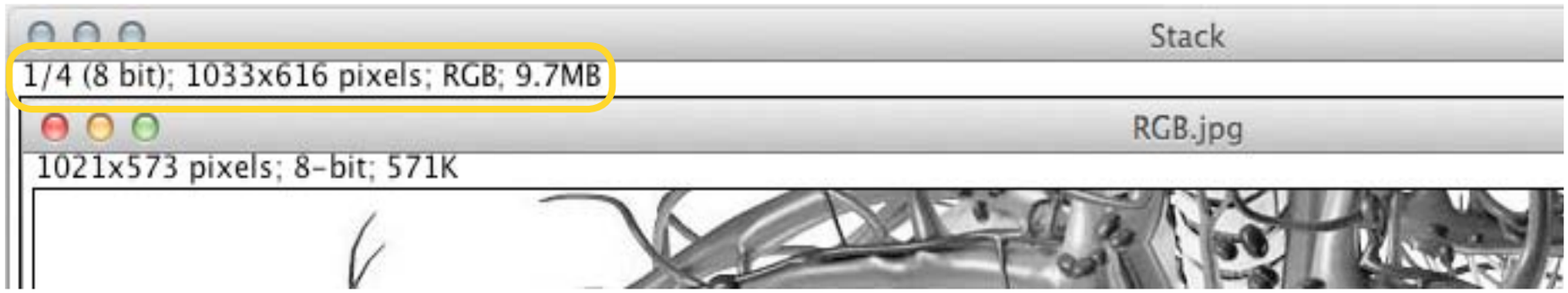
1. GROUP SIZE

↓

Z PROJECTION

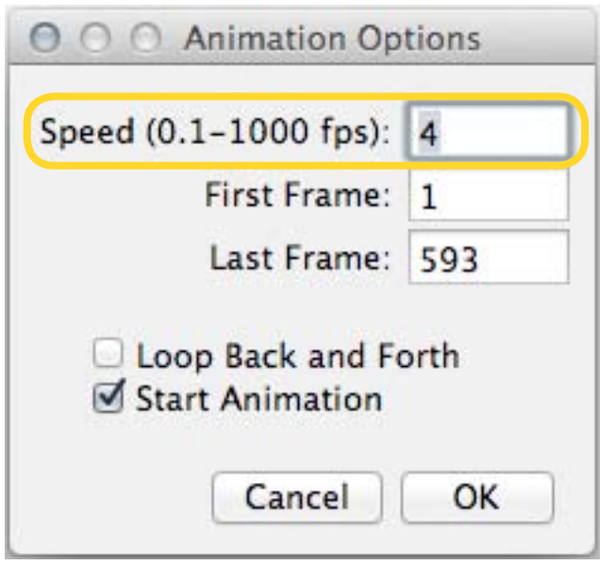
STACKS

Tools: Remove Slice Labels



STACKS

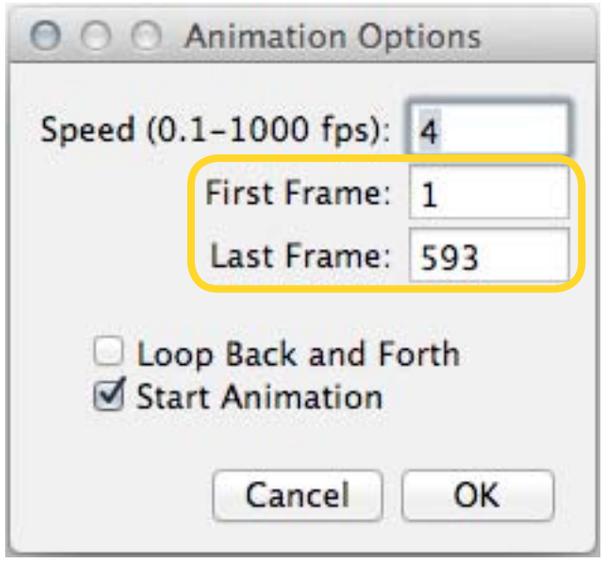
Tools: Start/Stop Animation & Options



VELOCIDADE (FRAMES/SEGUNDO)

STACKS

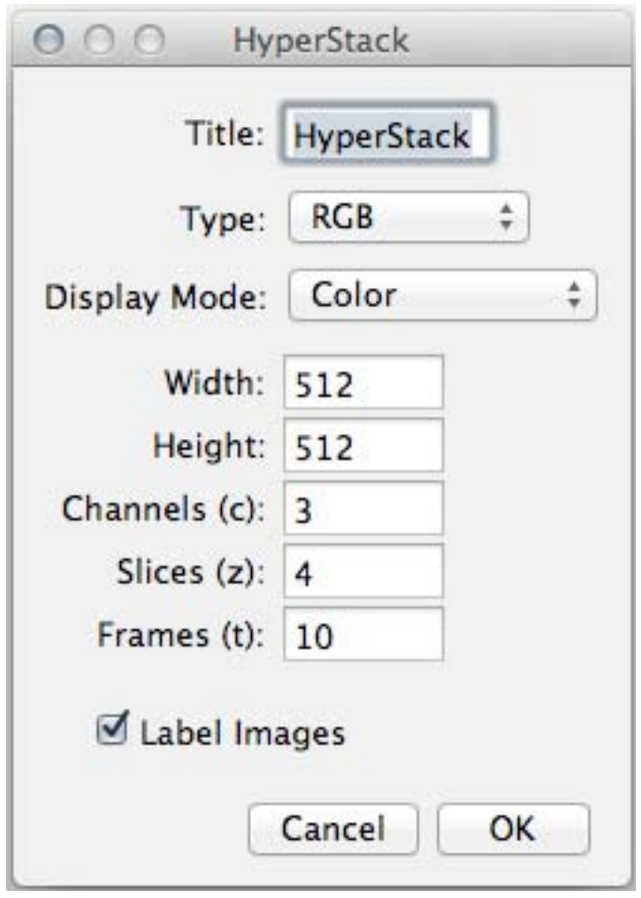
Tools: Start/Stop Animation & Options



PRIMEIRA/ÚLTIMA FRAME

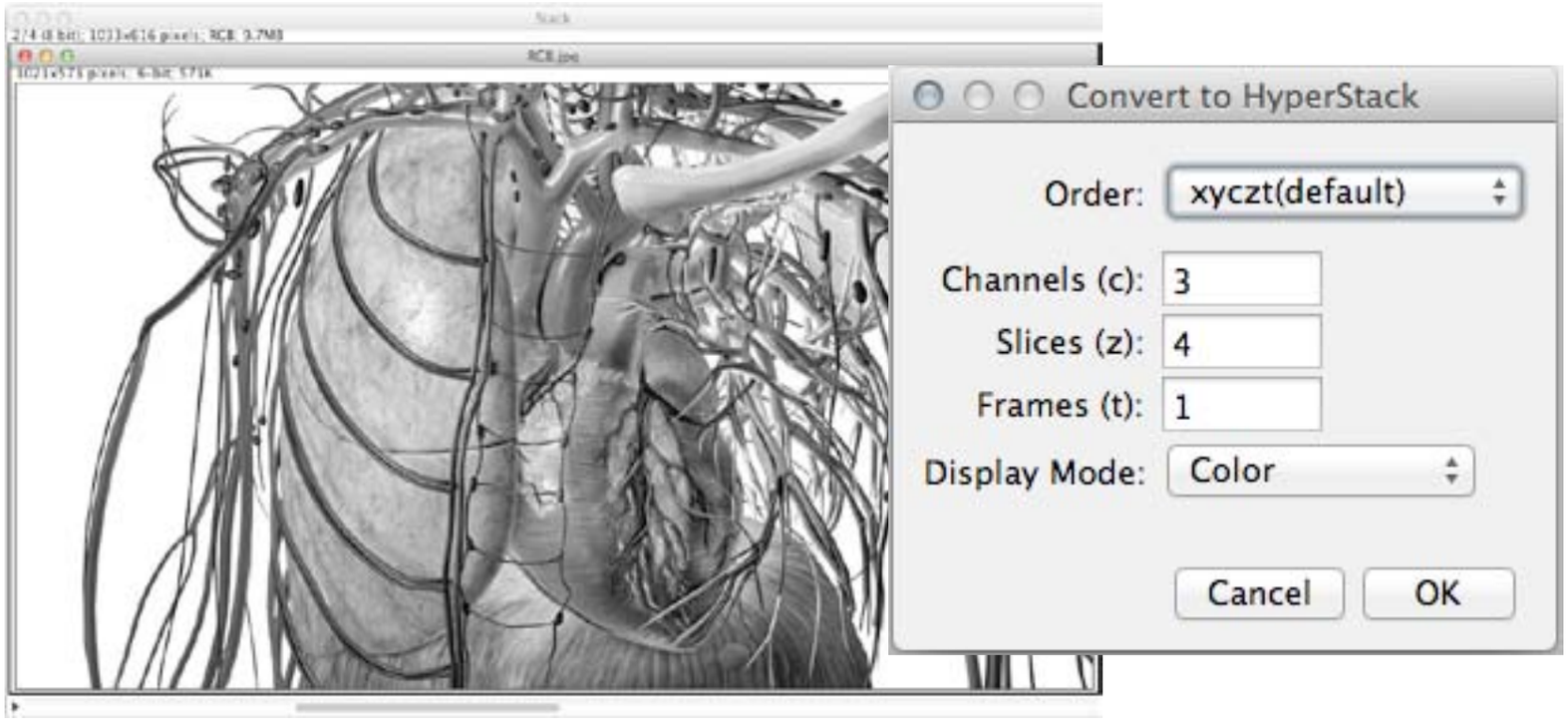
HYPERSTACKS

New Hyperstack



HYPERSTACKS

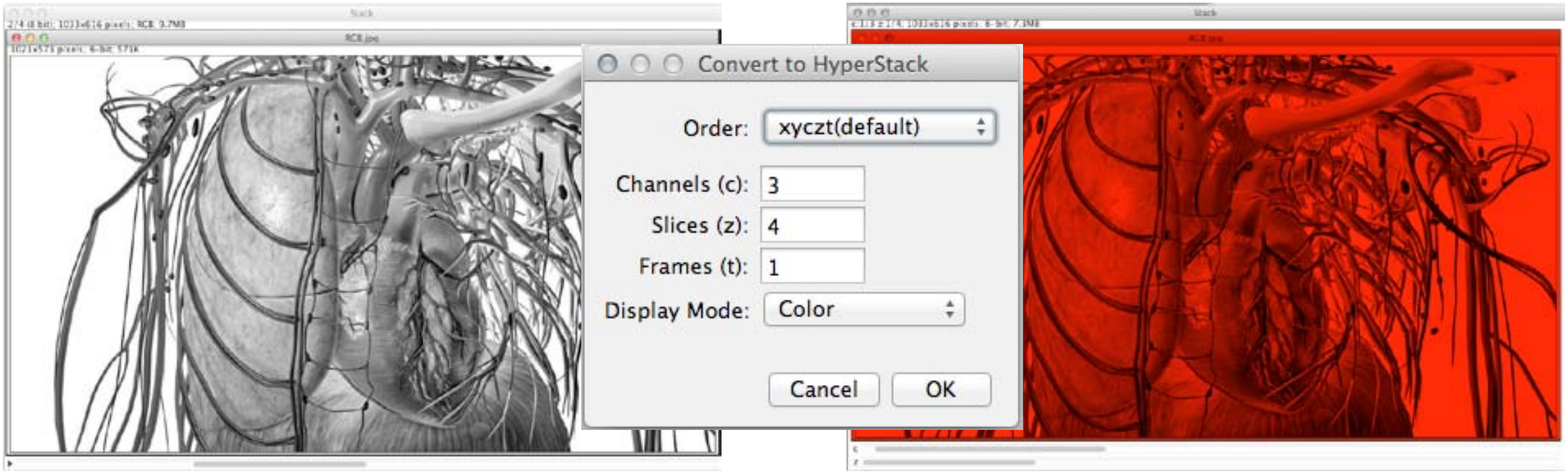
Stack to Hyperstack



STACK

HYPERSTACKS

Stack to Hyperstack



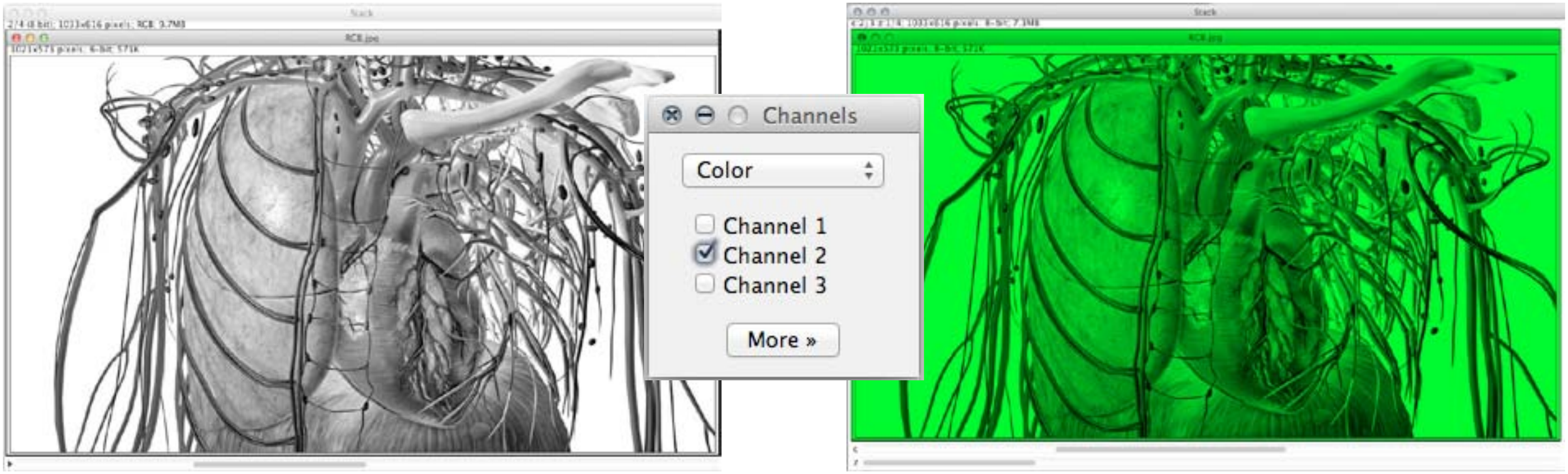
STACK

HYPERSTACK

CHANNEL 1

HYPERSTACKS

Stack to Hyperstack



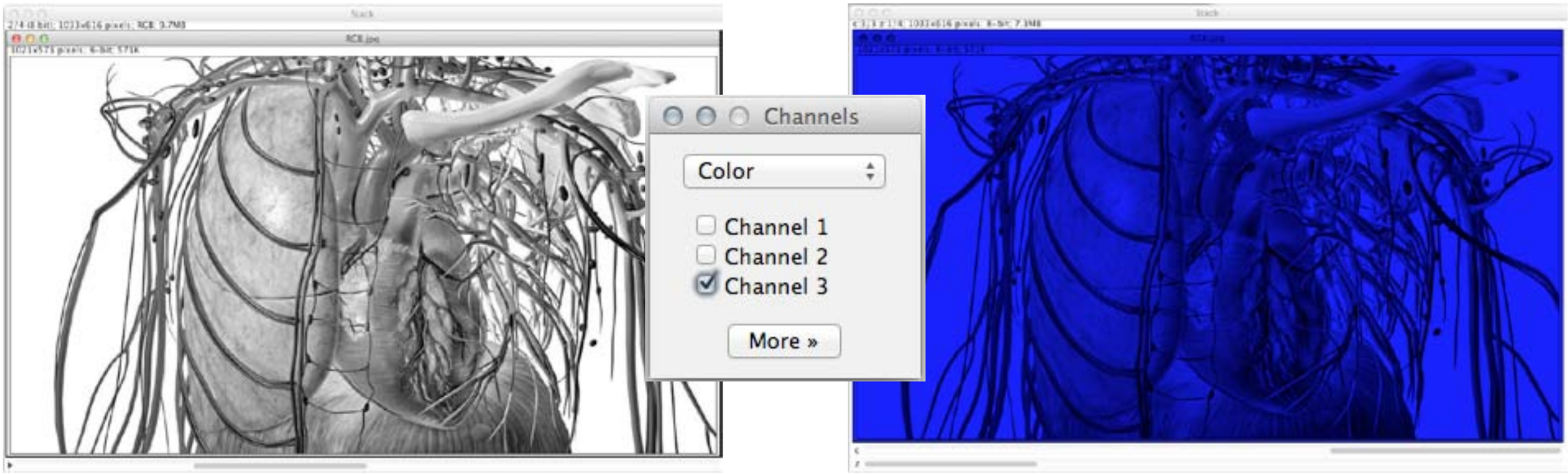
STACK

HYPERSTACK

CHANNEL 2

HYPERSTACKS

Stack to Hyperstack



STACK

HYPERSTACK

CHANNEL 3

HYPERSTACKS

Reduce Dimensionality

WIDTH (X)

HEIGHT (Y)

TIME (T)

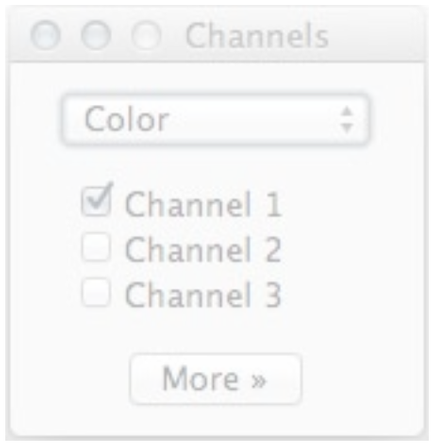
SLICES (Z)

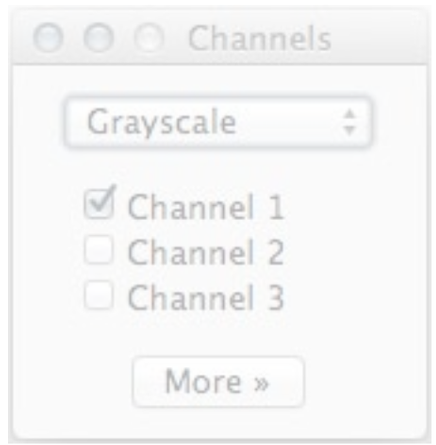
CHANNELS (C)

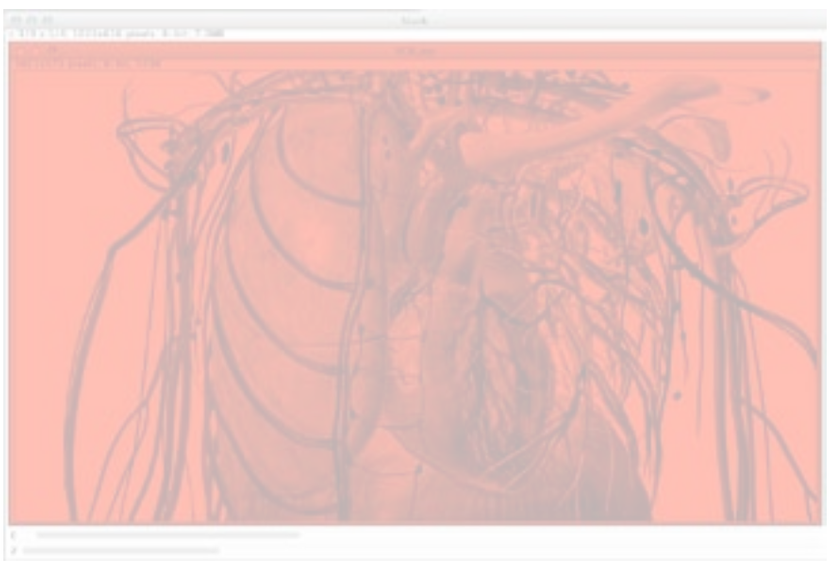
REDUÇÃO

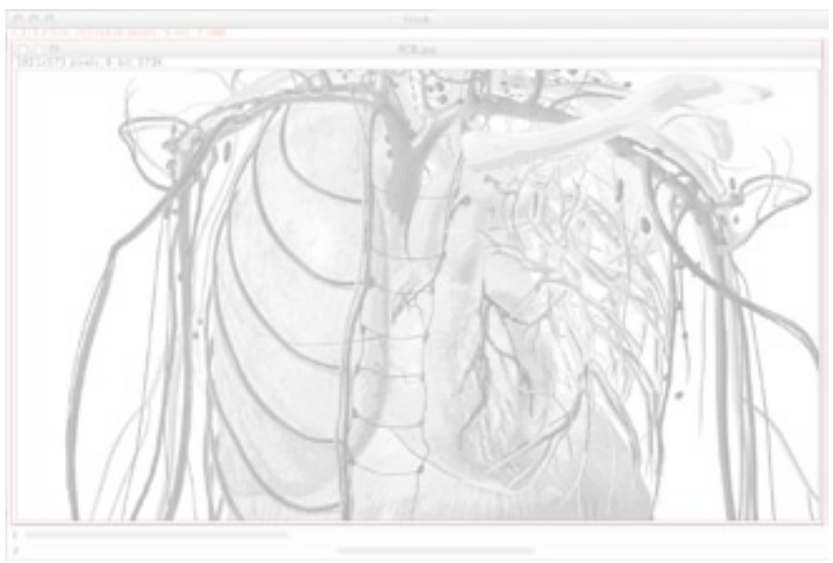
HYPERSTACKS

Channels Tool...









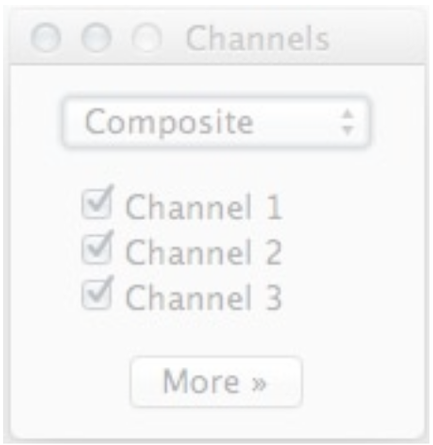
COMPÓSITO

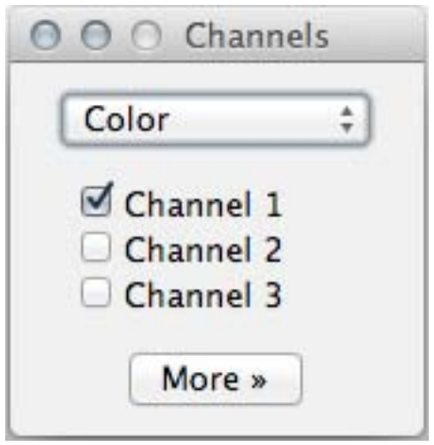
COR

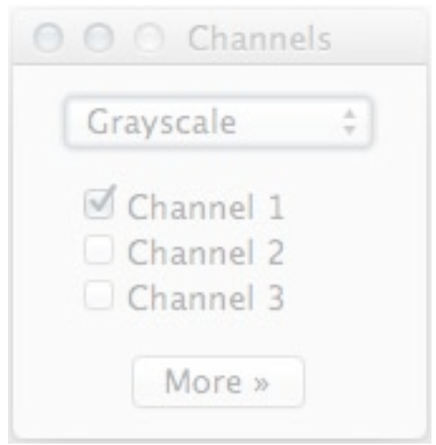
ESCALA DE CINZENTOS

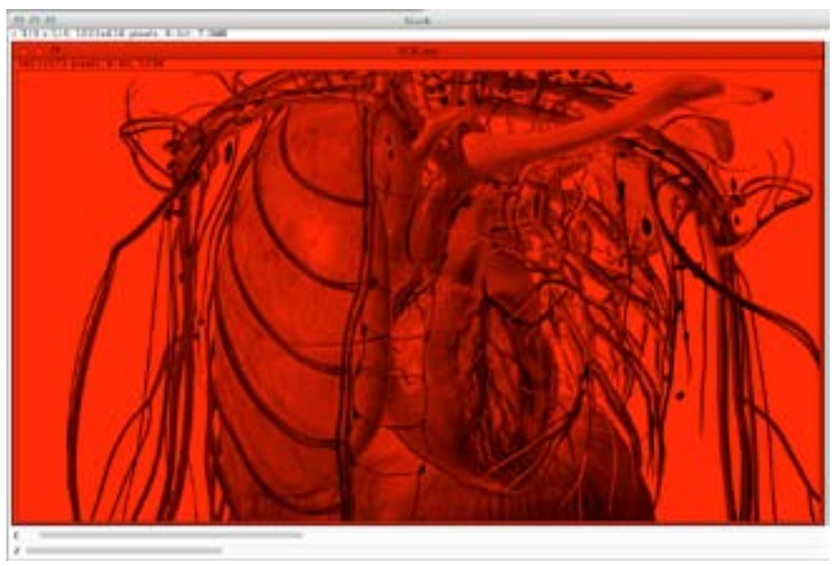
HYPERSTACKS

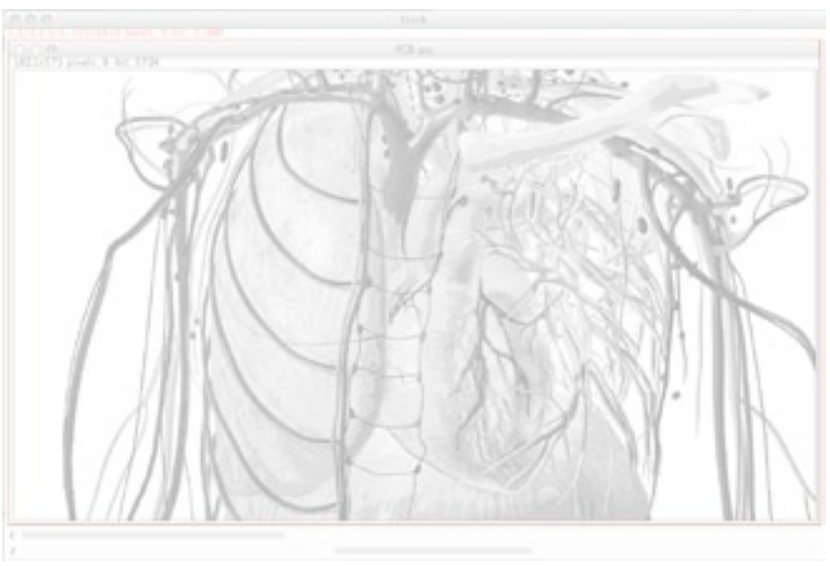
Channels Tool...











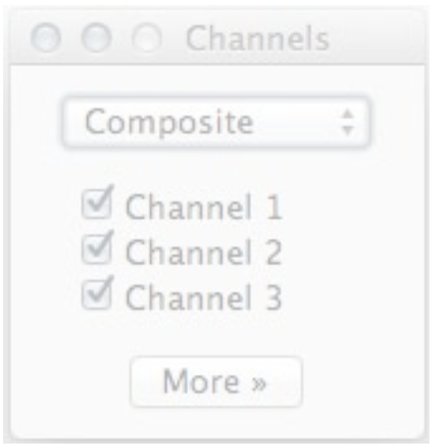
COMPÓSITO

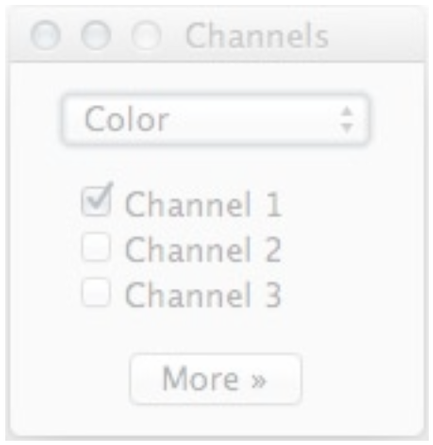
COR

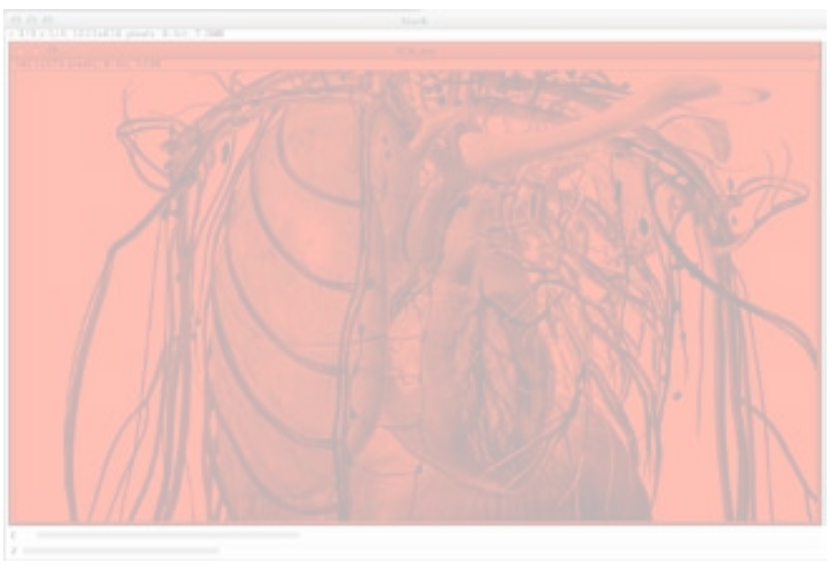
ESCALA DE CINZENTOS

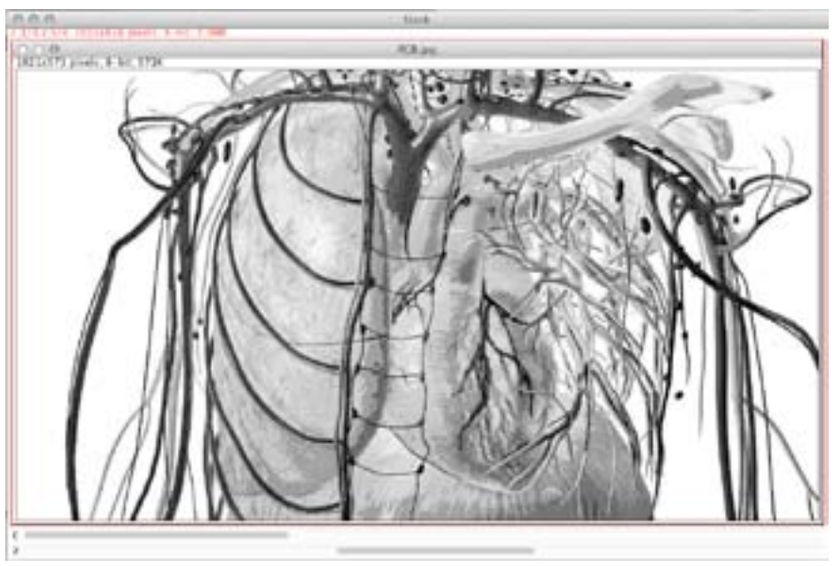
HYPERSTACKS

Channels Tool...







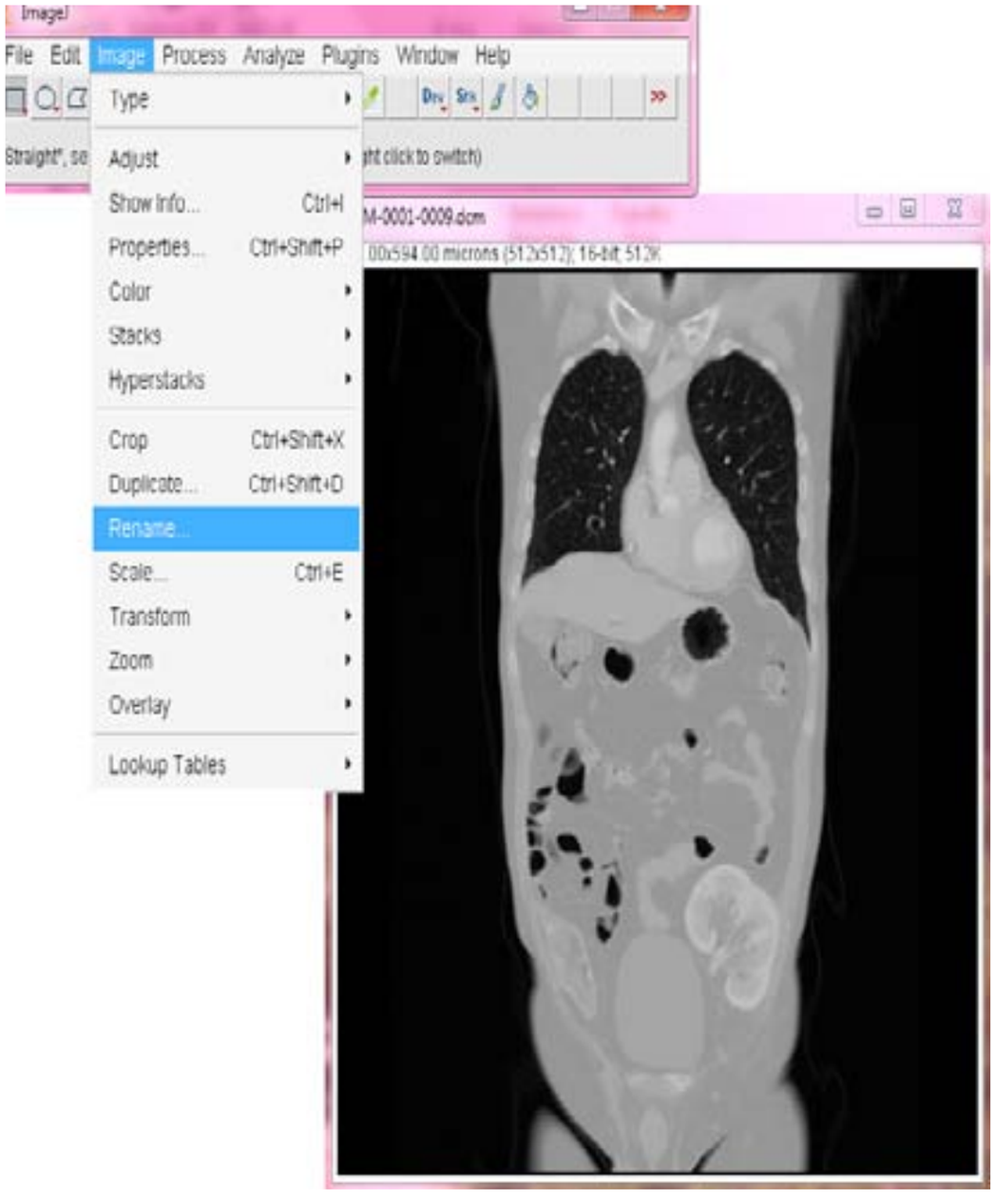


COMPÓSITO

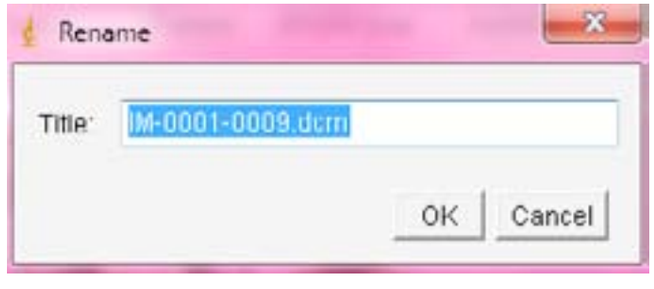
COR

ESCALA DE CINZENTOS

RENAME...


ImageJ
File Edit Image Process Analyze Plugins Window Help
Type
Adjust
Show Info... Ctrl+I
Properties... Ctrl+Shift+P
Color
Stacks
Hyperstacks
Crop Ctrl+Shift+X
Duplicate... Ctrl+Shift+D
Rename...
Scale... Ctrl+E
Transform
Zoom
Overlay
Lookup Tables
M-0001-0009.dcm


IM-0001-0009.dcm
594.00x594.00 microns (512x512); 16-bit; 512K


Rename
Title:
IM-0001-0009.dcm
OK
Cancel

SCALE

Interpolação Bilinear

512X512

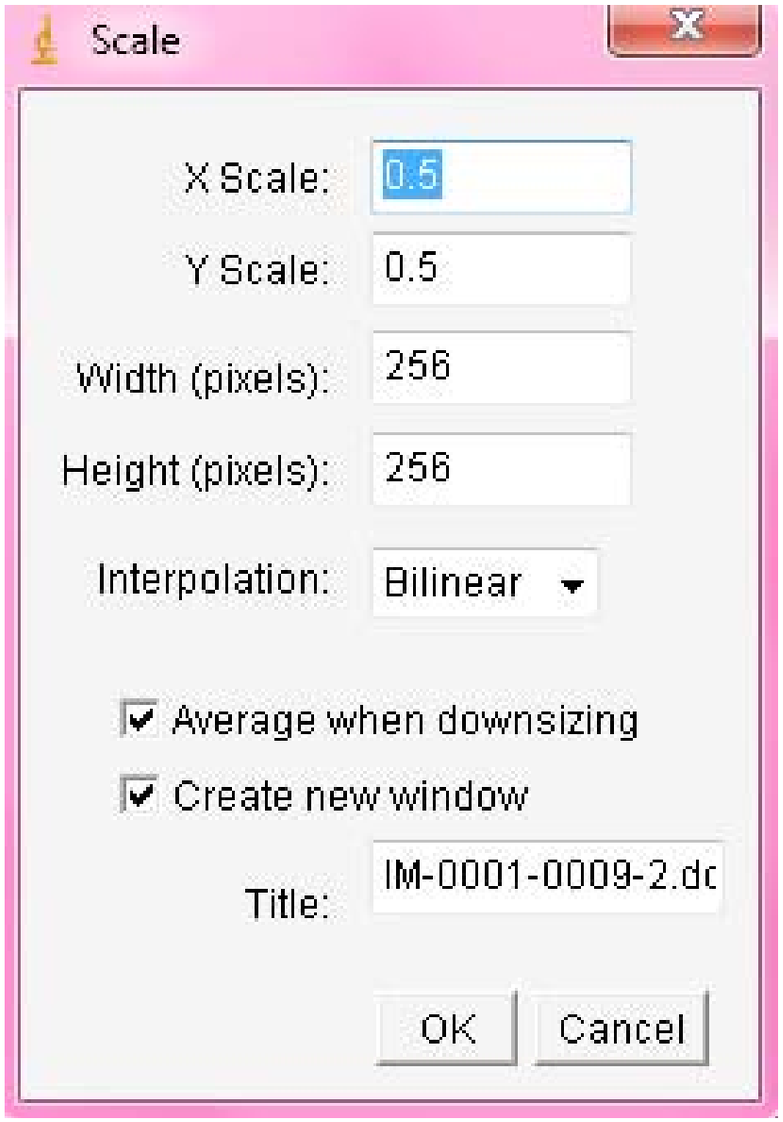
512K

SCALE

Interpolação Bilinear

512X512

512K

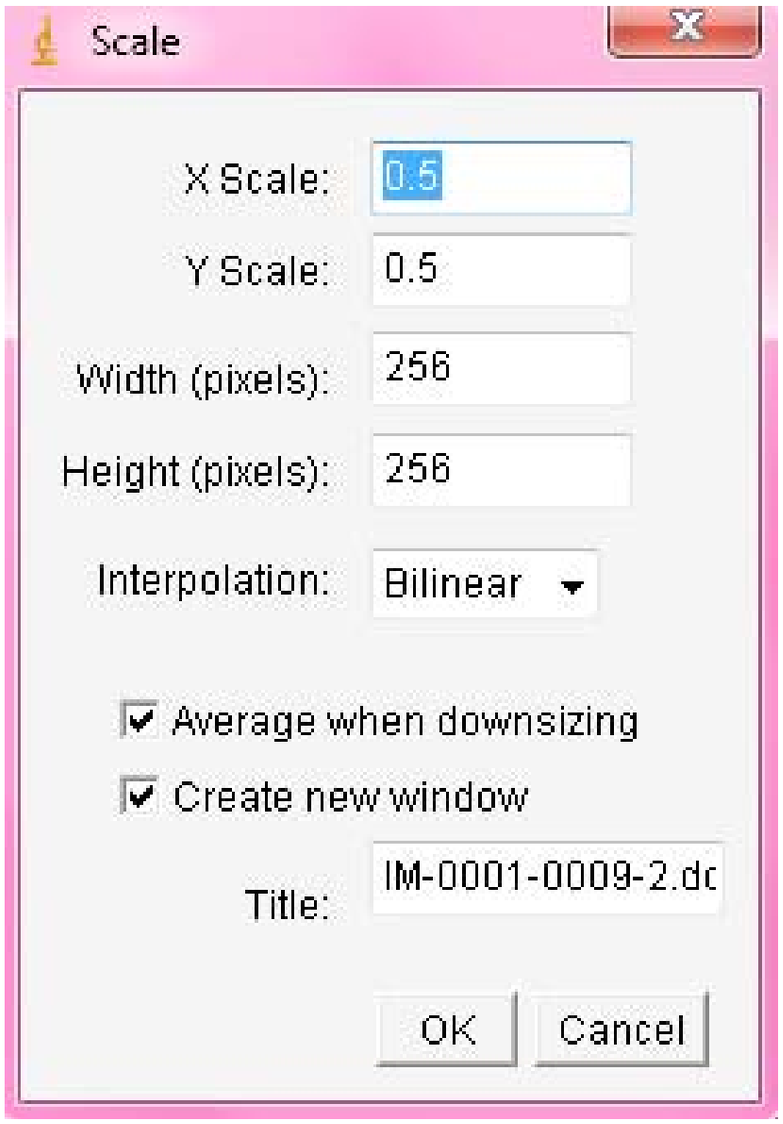


SCALE

Interpolação Bilinear

512X512

512K



256X256

128K

SCALE

Interpolação Bicúbica

512X512

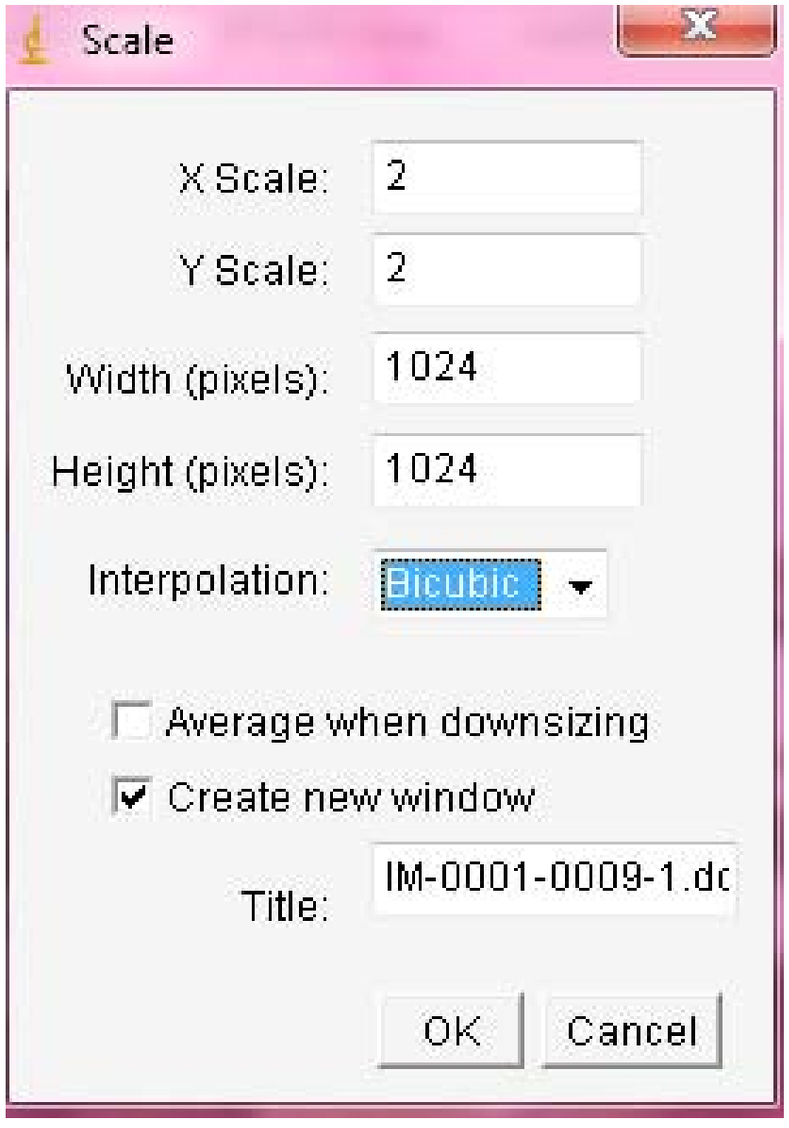
512K

SCALE

Interpolação Bicúbica

512X512

512K

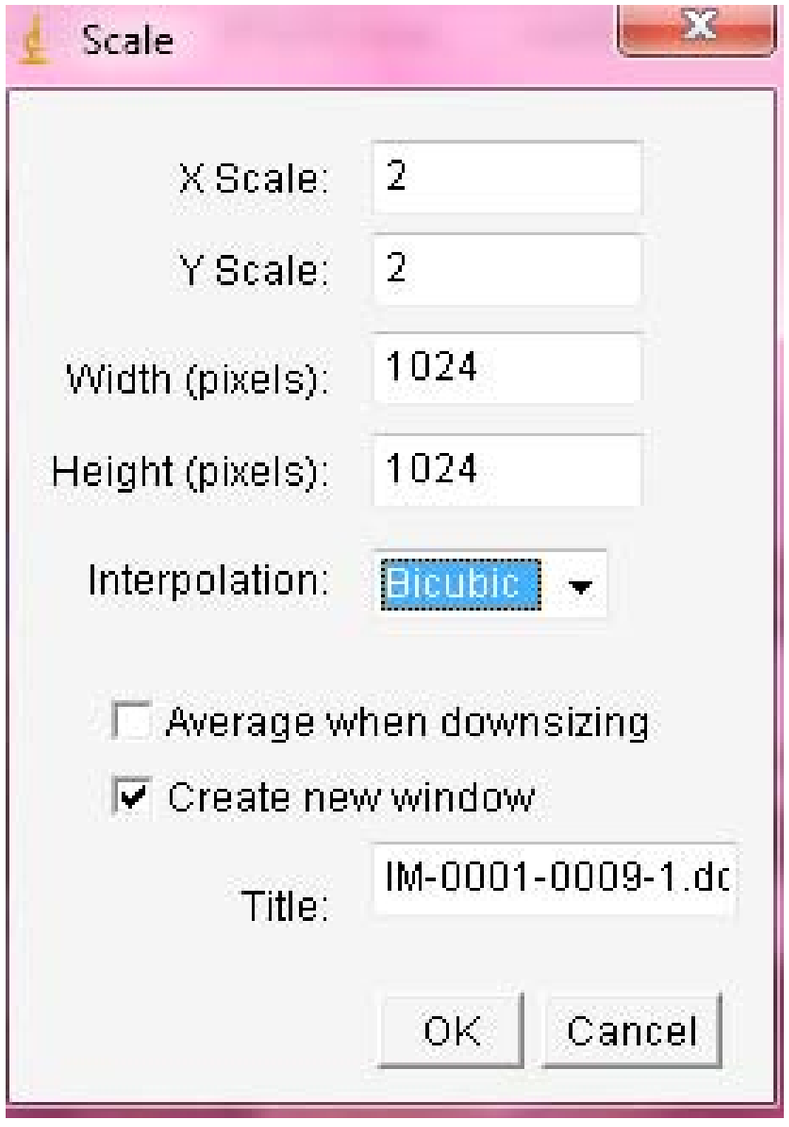


SCALE

Interpolação Bicúbica

512X512

512K



1024X1024

2MB

SCALE

Stacks

512X512

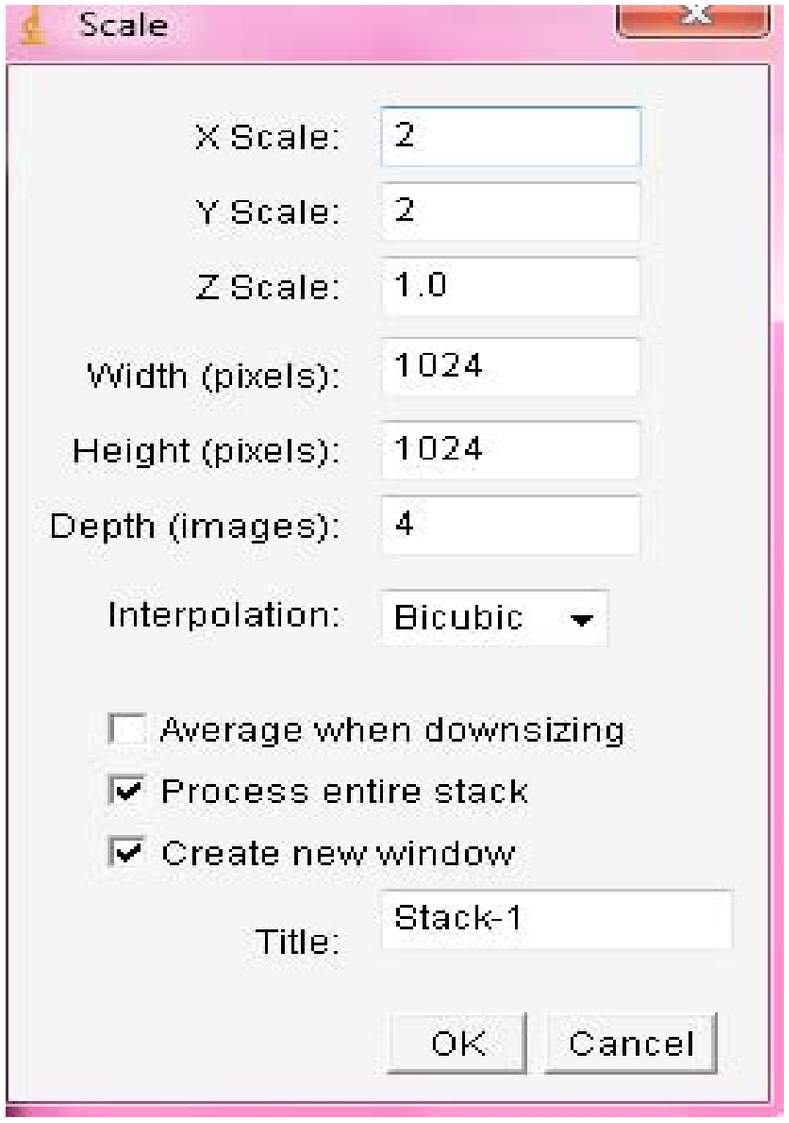
2MB

SCALE

Stacks

512X512

2MB

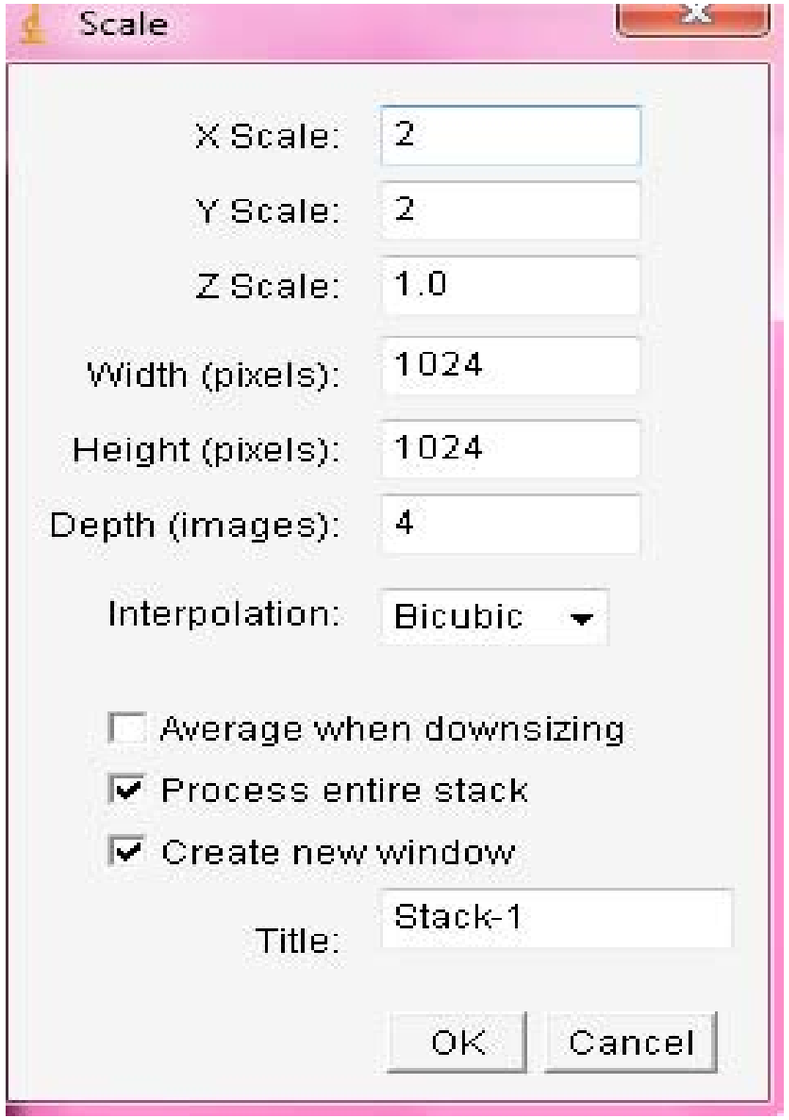


SCALE

Stacks

512X512

2MB



1024X1024

8MB

SCALE

Stacks

512X512

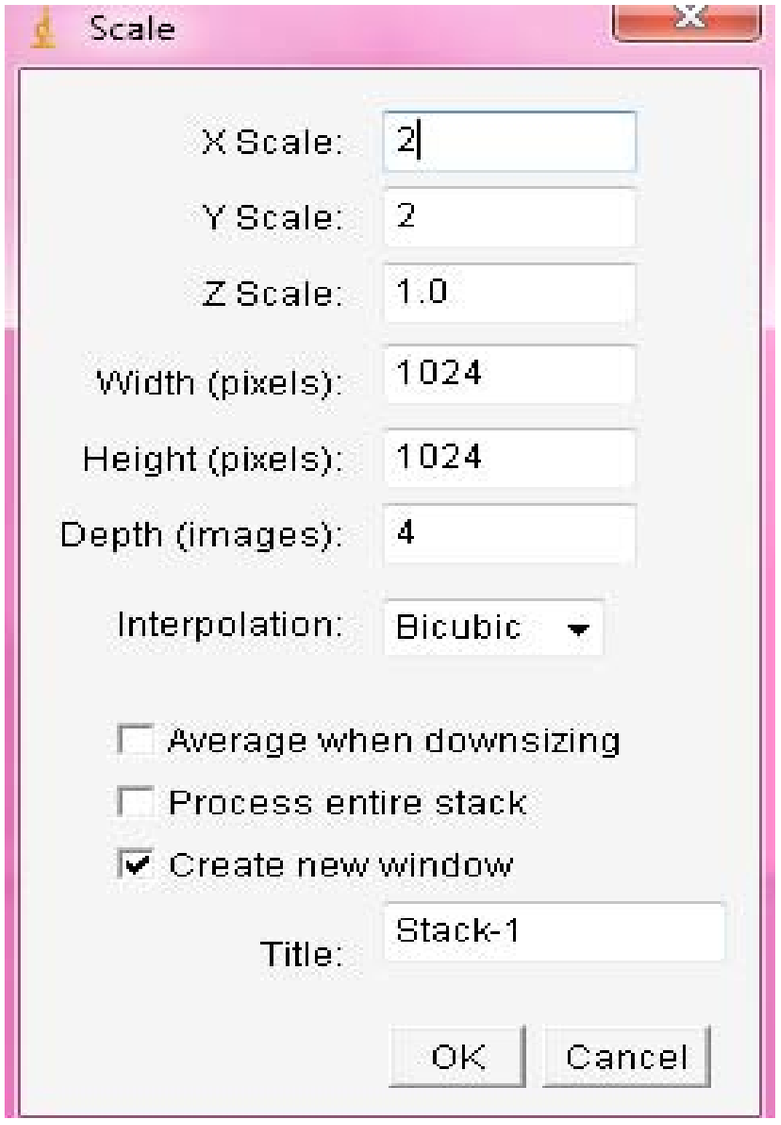
2MB

SCALE

Stacks

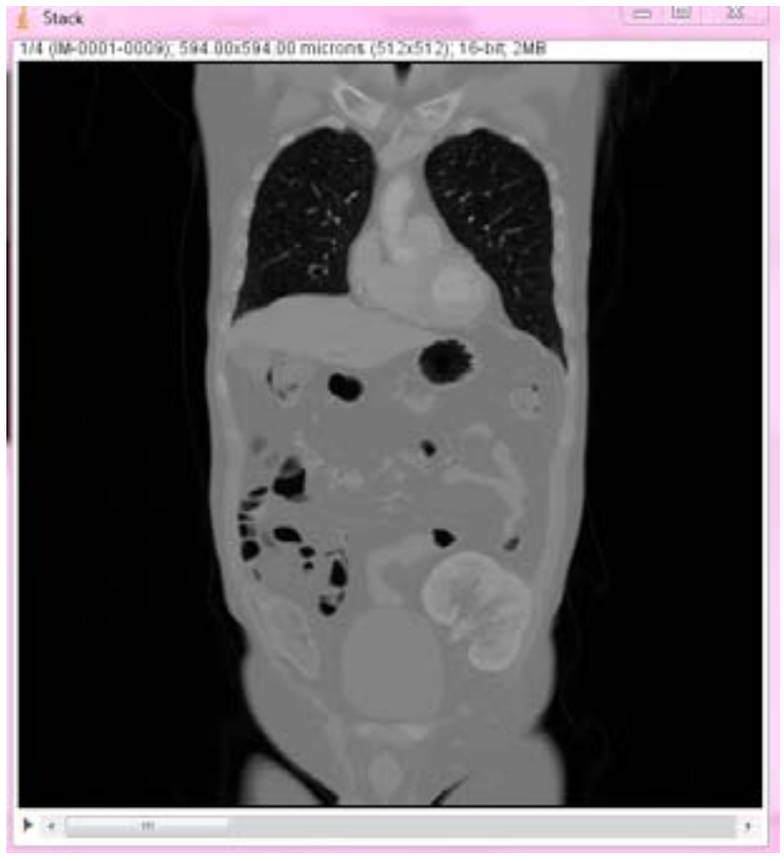
512X512

2MB



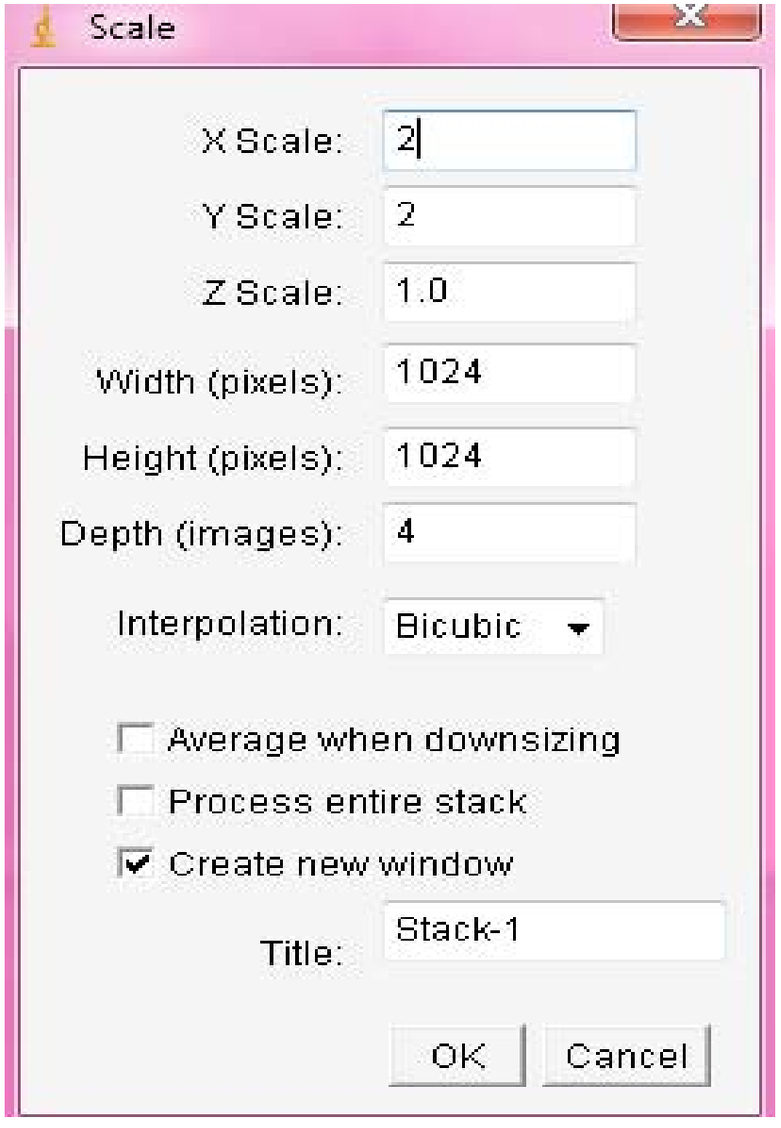
SCALE

Stacks



512X512

2MB



1024X1024

2MB

ZOOM

In & Out

ZOOM

In & Out


IM-0001-0003.dcm
594.00x594.00 microns (512x512); 16-bit; 512K

+


IM-0001-0003.dcm (150%)
594.00x594.00 microns (512x512); 16-bit; 512K

ZOOM

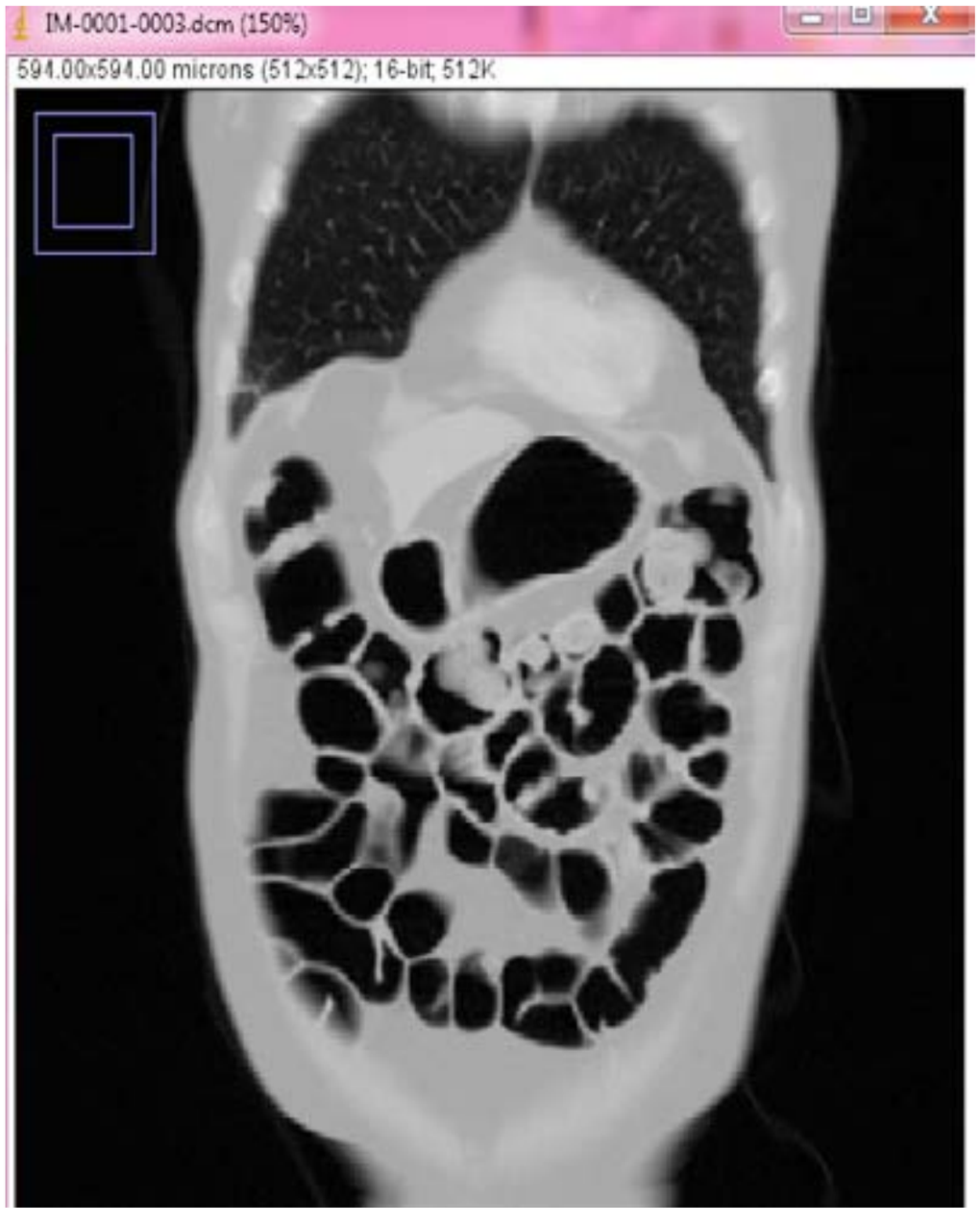
In & Out


IM-0001-0003.dcm
594.00x594.00 microns (512x512); 16-bit; 512K

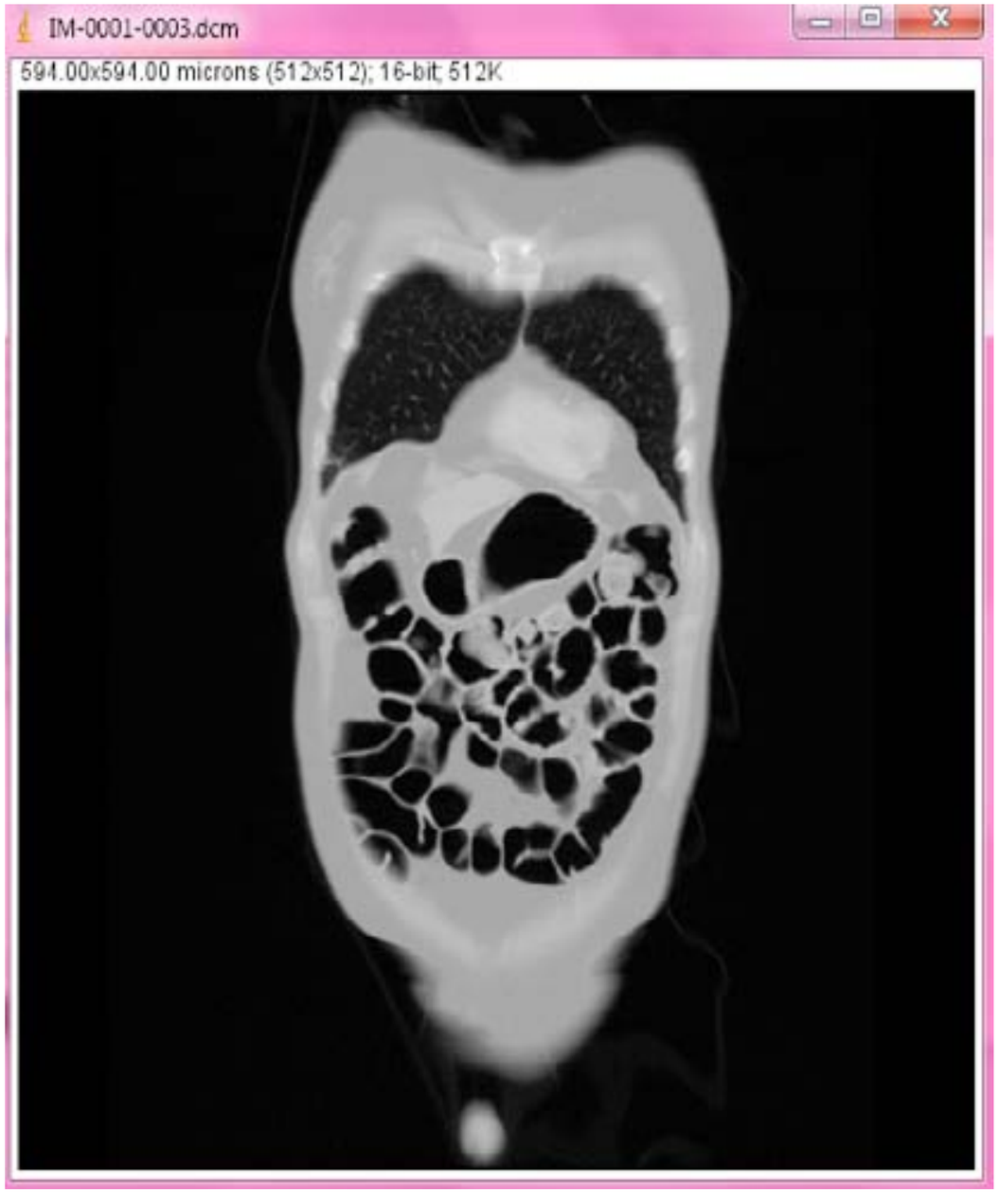

IM-0001-0003.dcm (75%)
594.00x594.00 microns (512x512); 16-bit; 512K

ZOOM

Original Scale



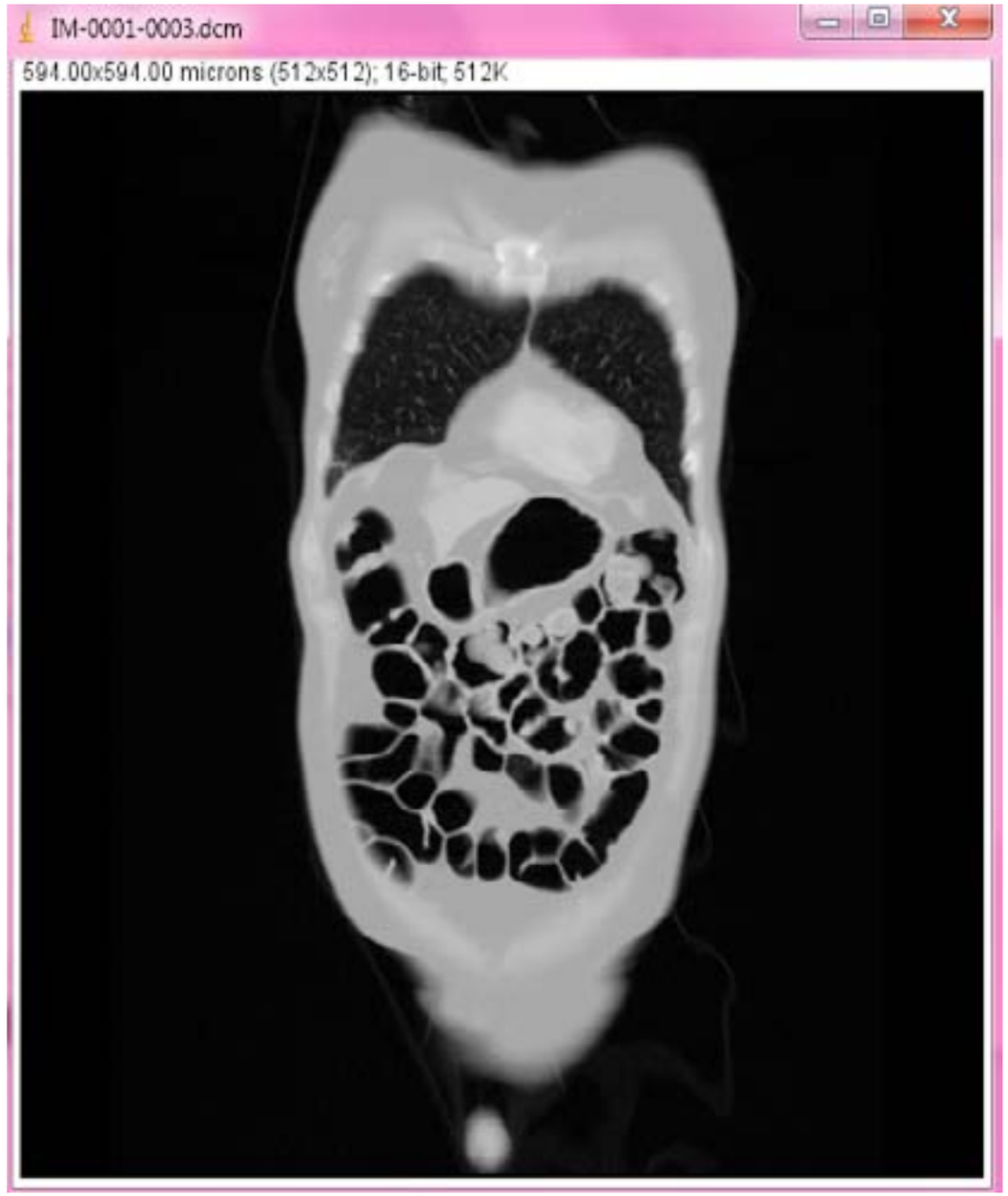
150%



ESCALA ORIGINAL

ZOOM

View 100%

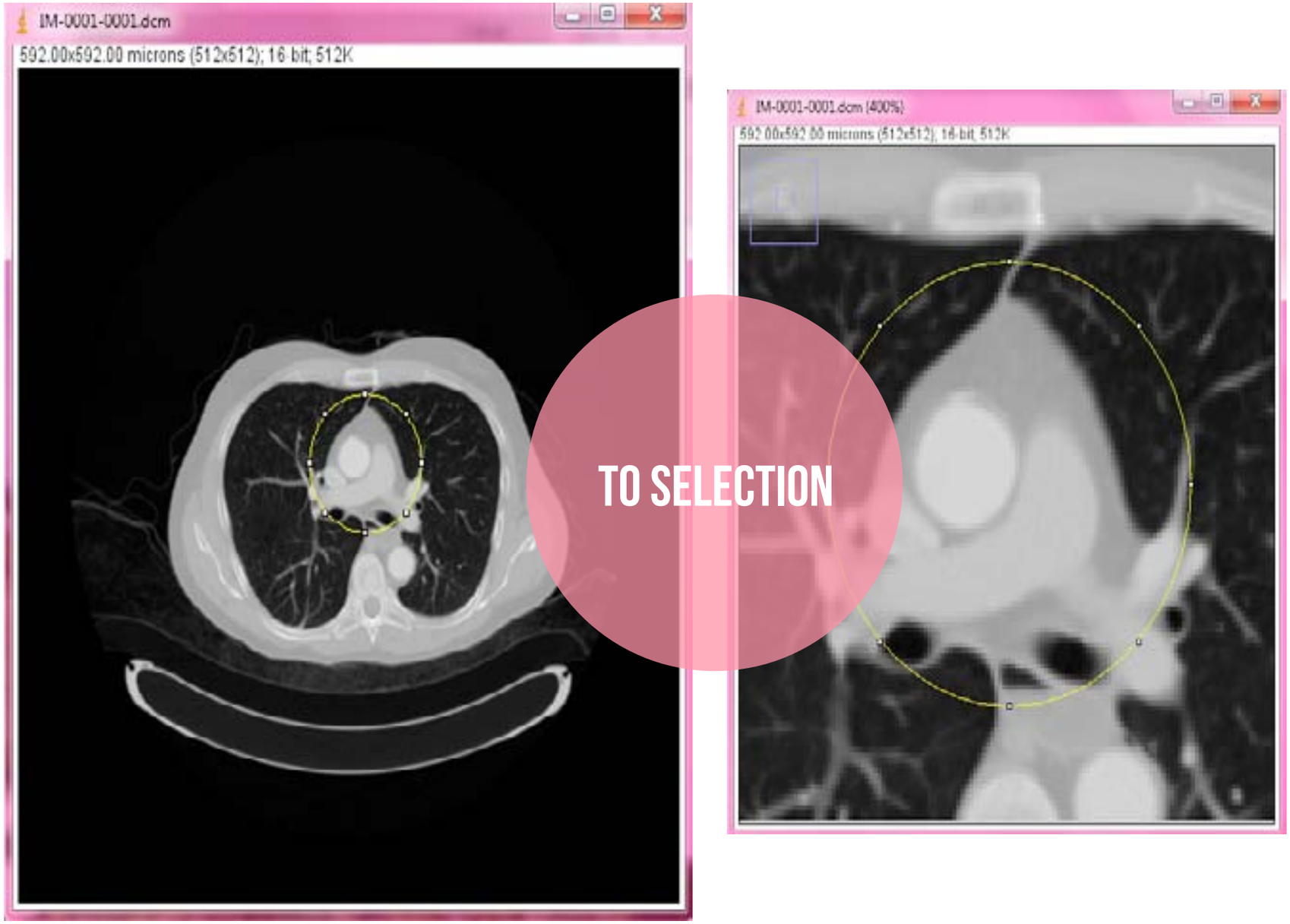


50%

VIEW 100%

ZOOM

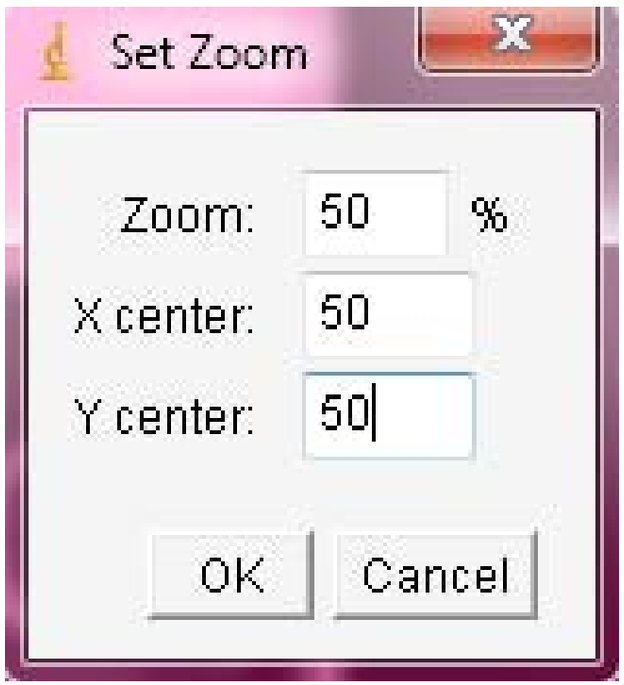
To Selection



ZOOM

Set

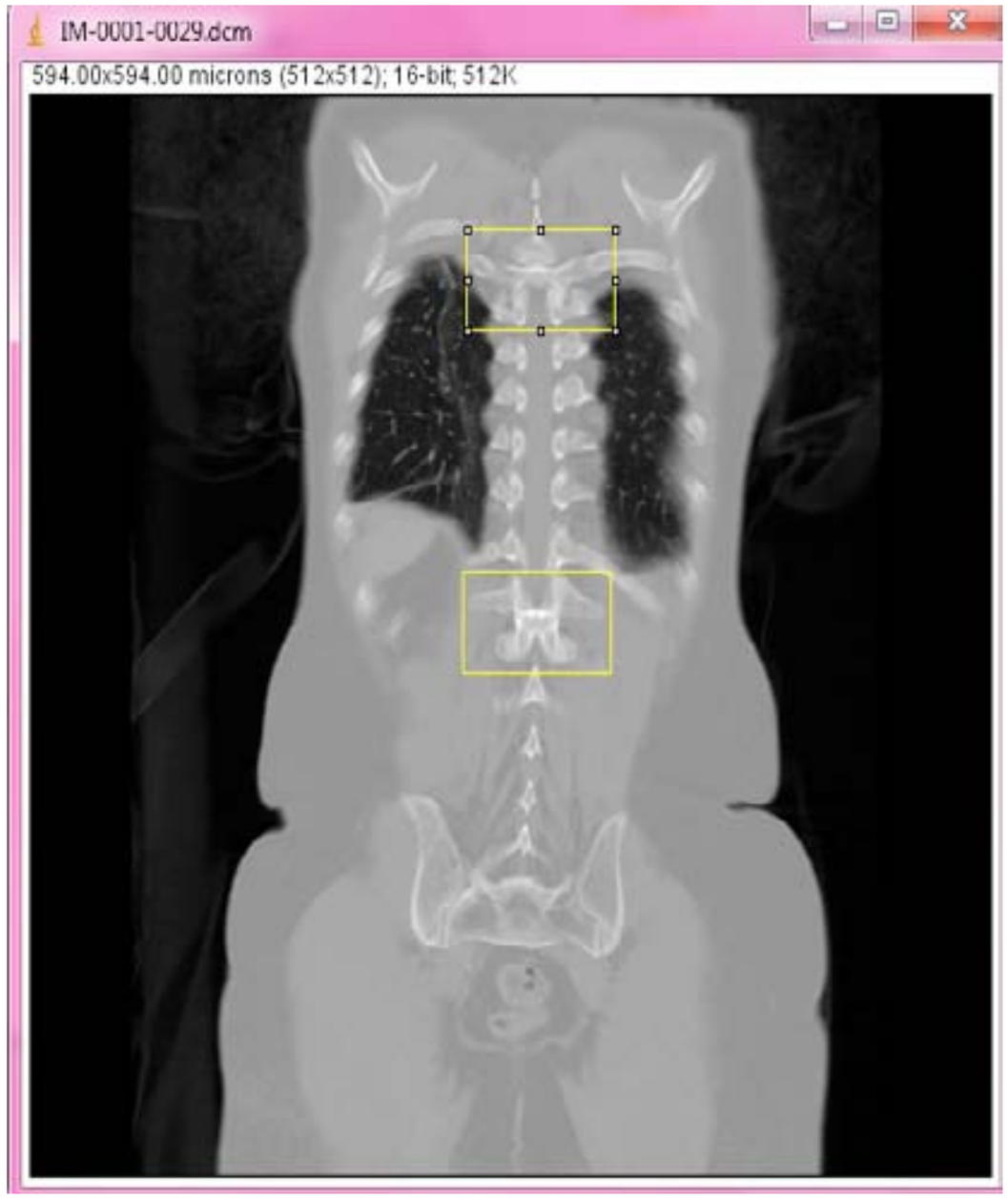

IM-0001-0001.dcm
592.00x592.00 microns (512x512); 16-bit; 512K


Set Zoom
Zoom:
50
%
X center:
50
Y center:
50
OK
Cancel


IM-0001-0001.dcm (50%)
592.00x592.00 microns (512x512); 16-bit; 512K

OVERLAY

Add Selection



OVERLAY

Add Image

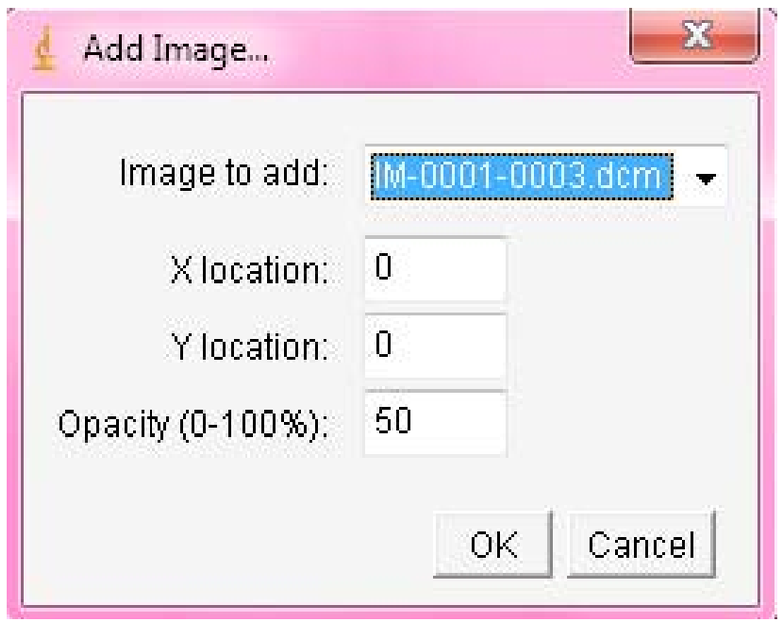


IMAGEM DE ACOLHIMENTO

IMAGEM A SOBREPÔR

OVERLAY

Add Image

IMAGEM SOBREPOSTA

OVERLAY

Hide & Show Overlay

ADD SELECTION

OVERLAY

Hide & Show Overlay

ADD SELECTION

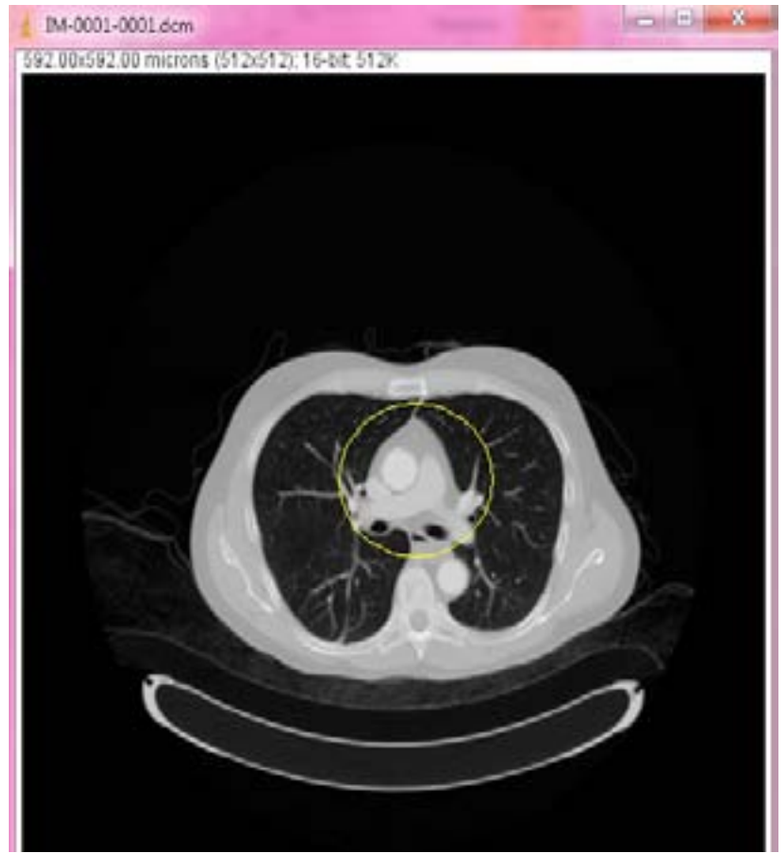
HIDE OVERLAY

OVERLAY

Hide & Show Overlay

ADD SELECTION

HIDE OVERLAY



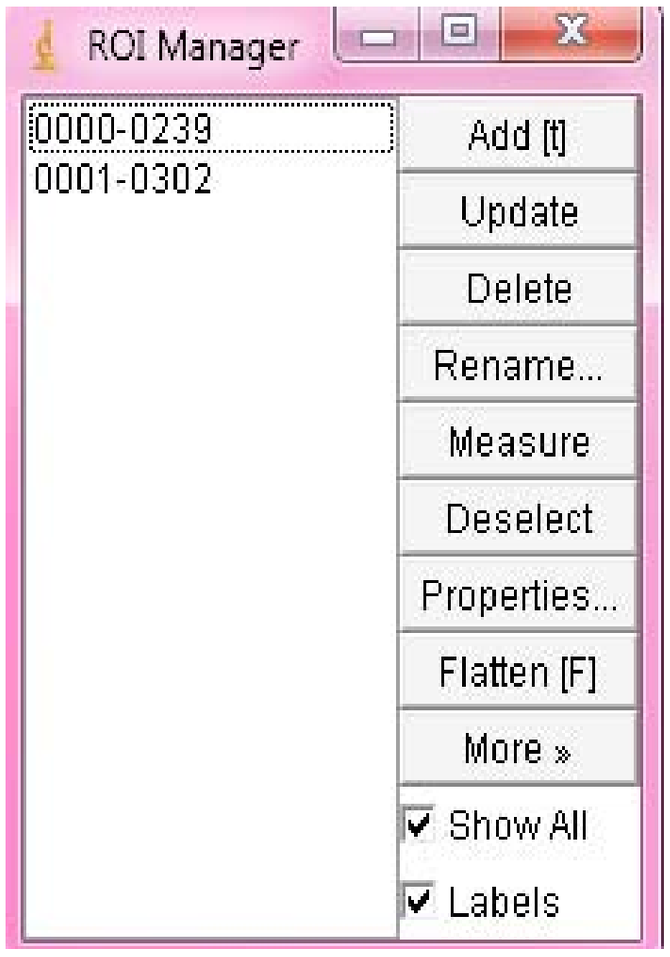
SHOW OVERLAY

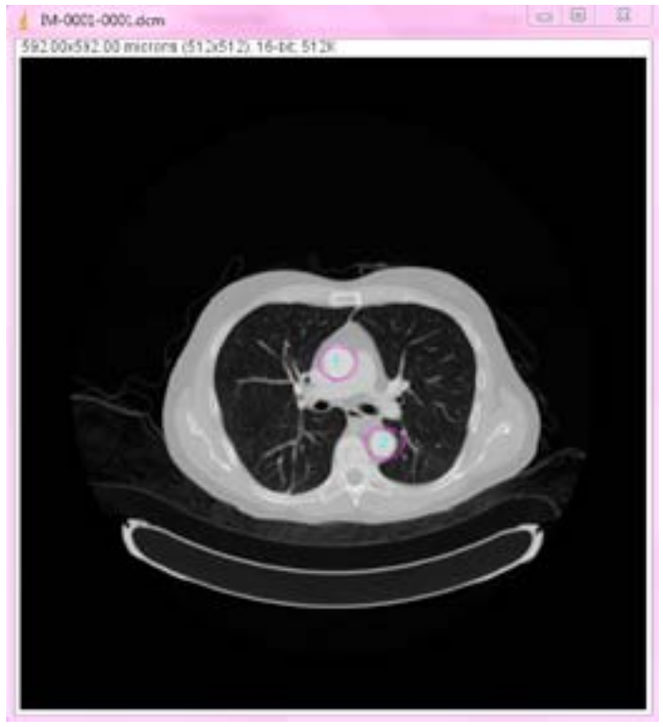
OVERLAY

From ROI Manager

OVERLAY

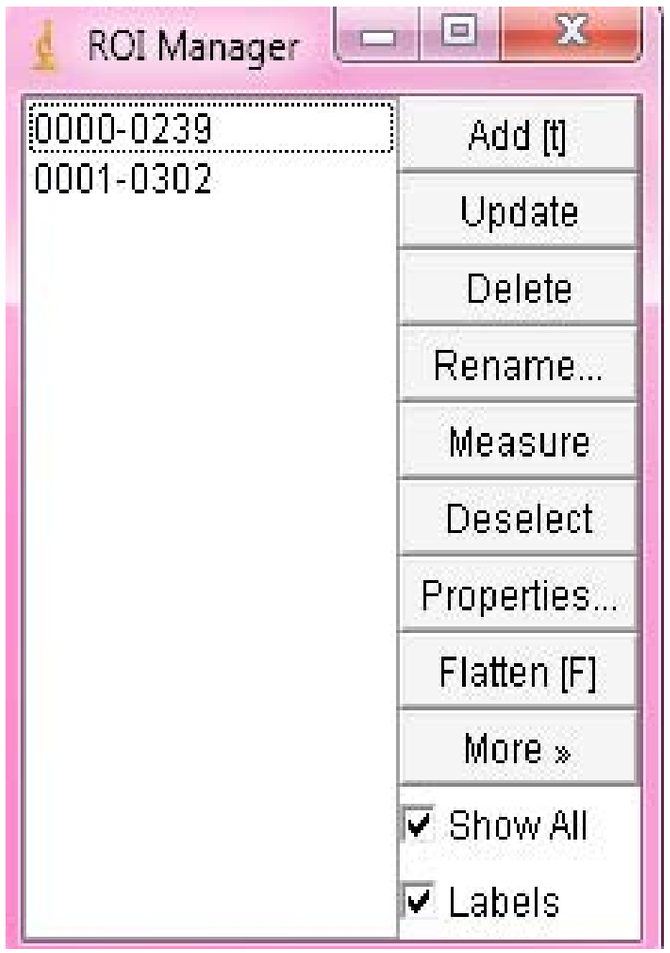
To ROI Manager

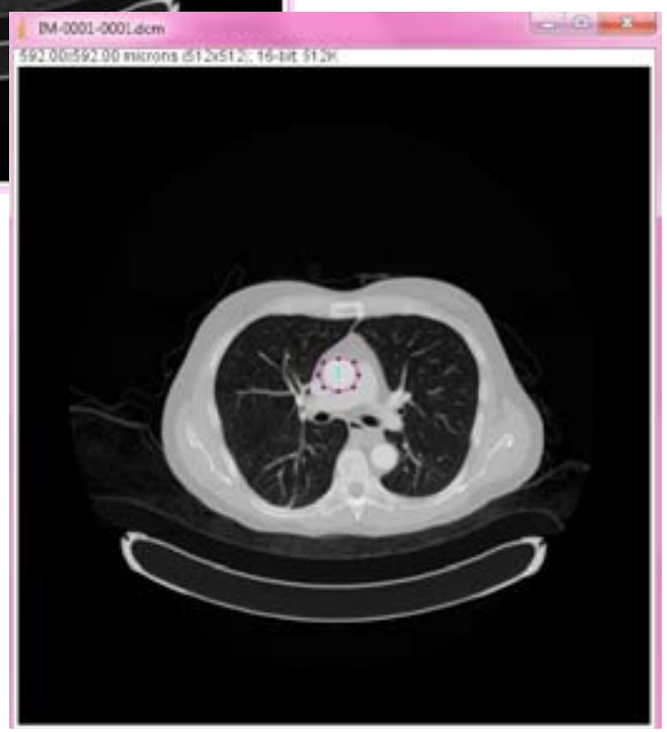


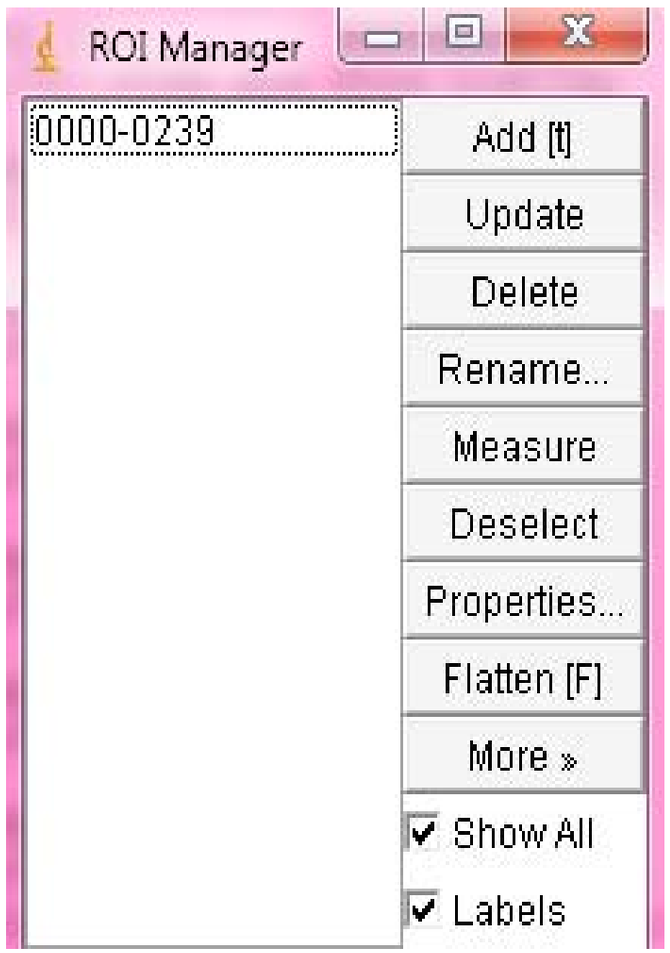


OVERLAY

To ROI Manager





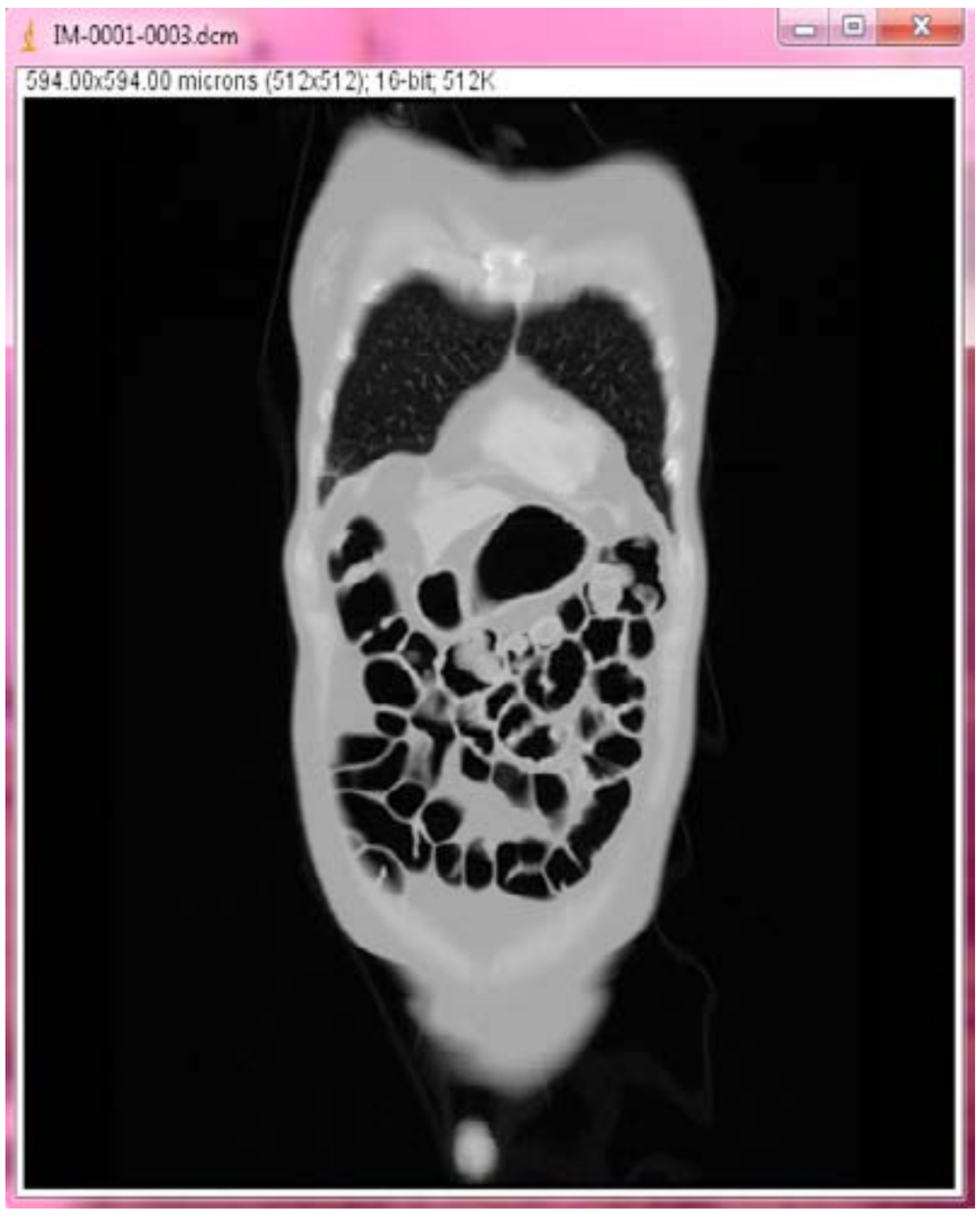


OVERLAY

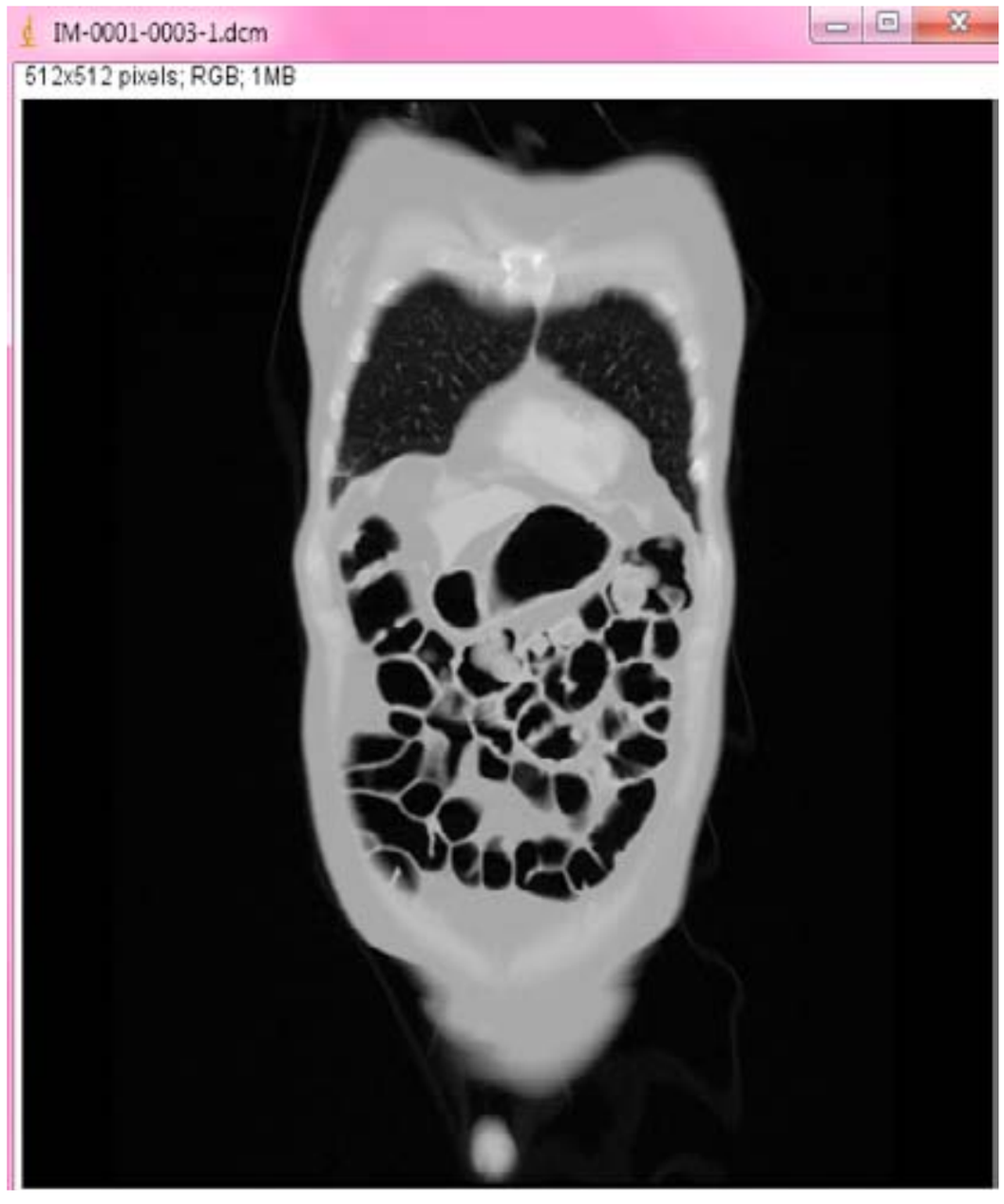
Remove Overlay

OVERLAY

Flatten



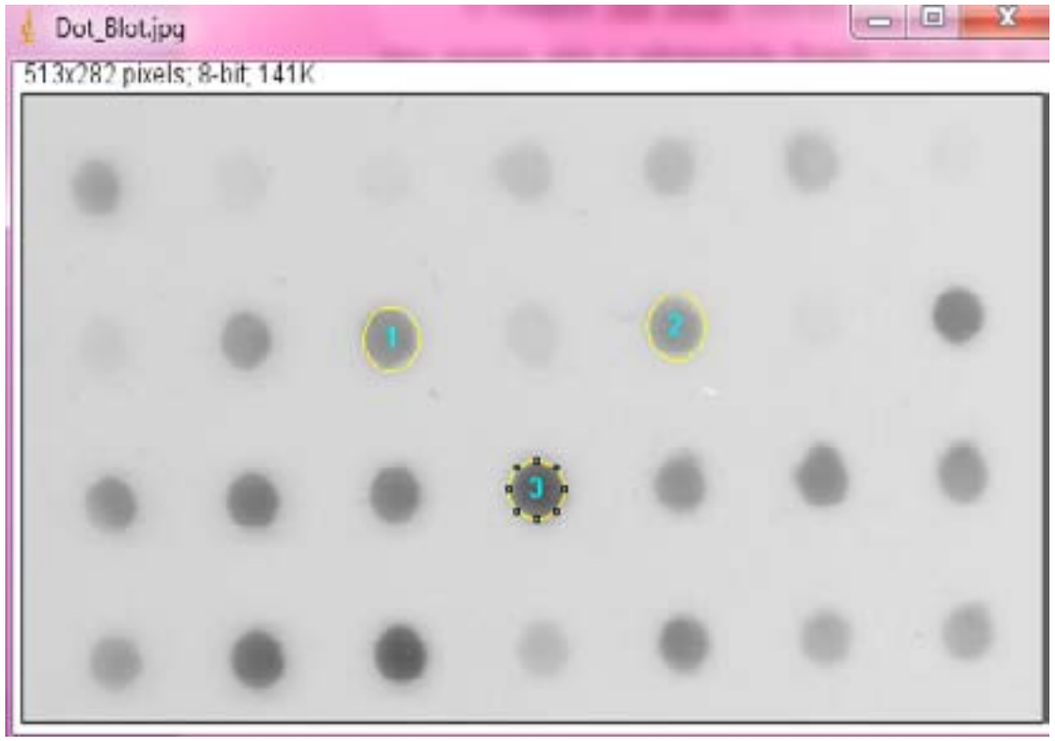
16-BIT



RGB

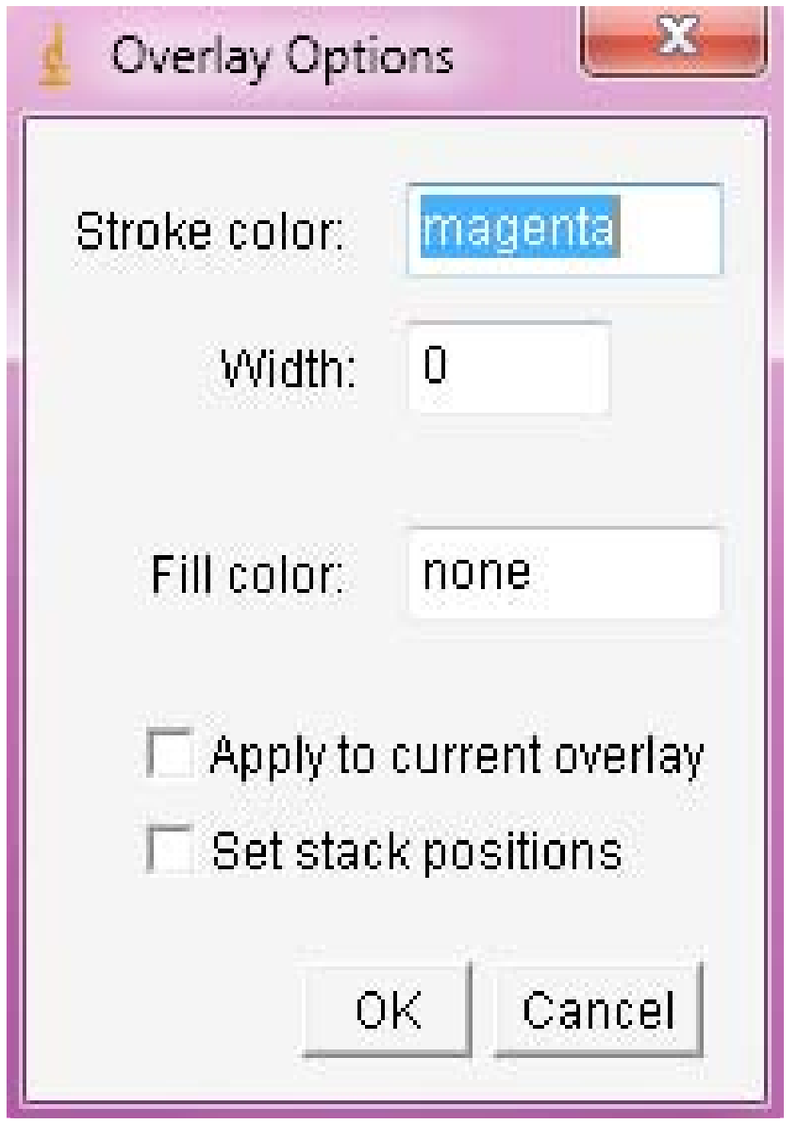
OVERLAY

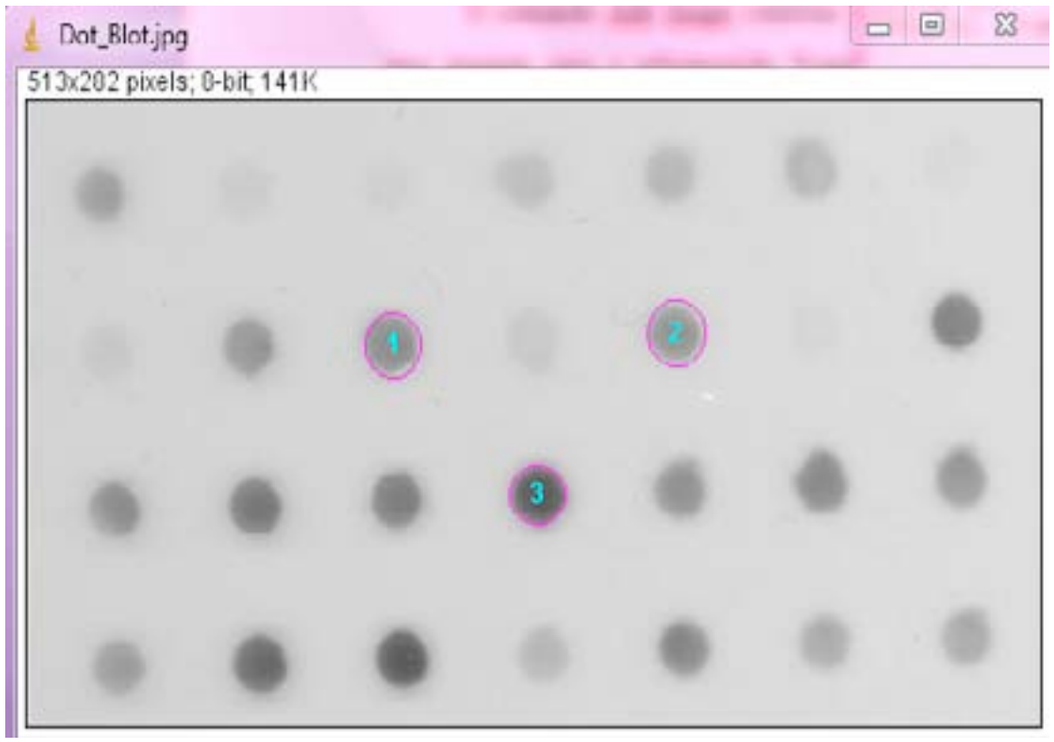
Labels



OVERLAY

Overlay Options





FIM