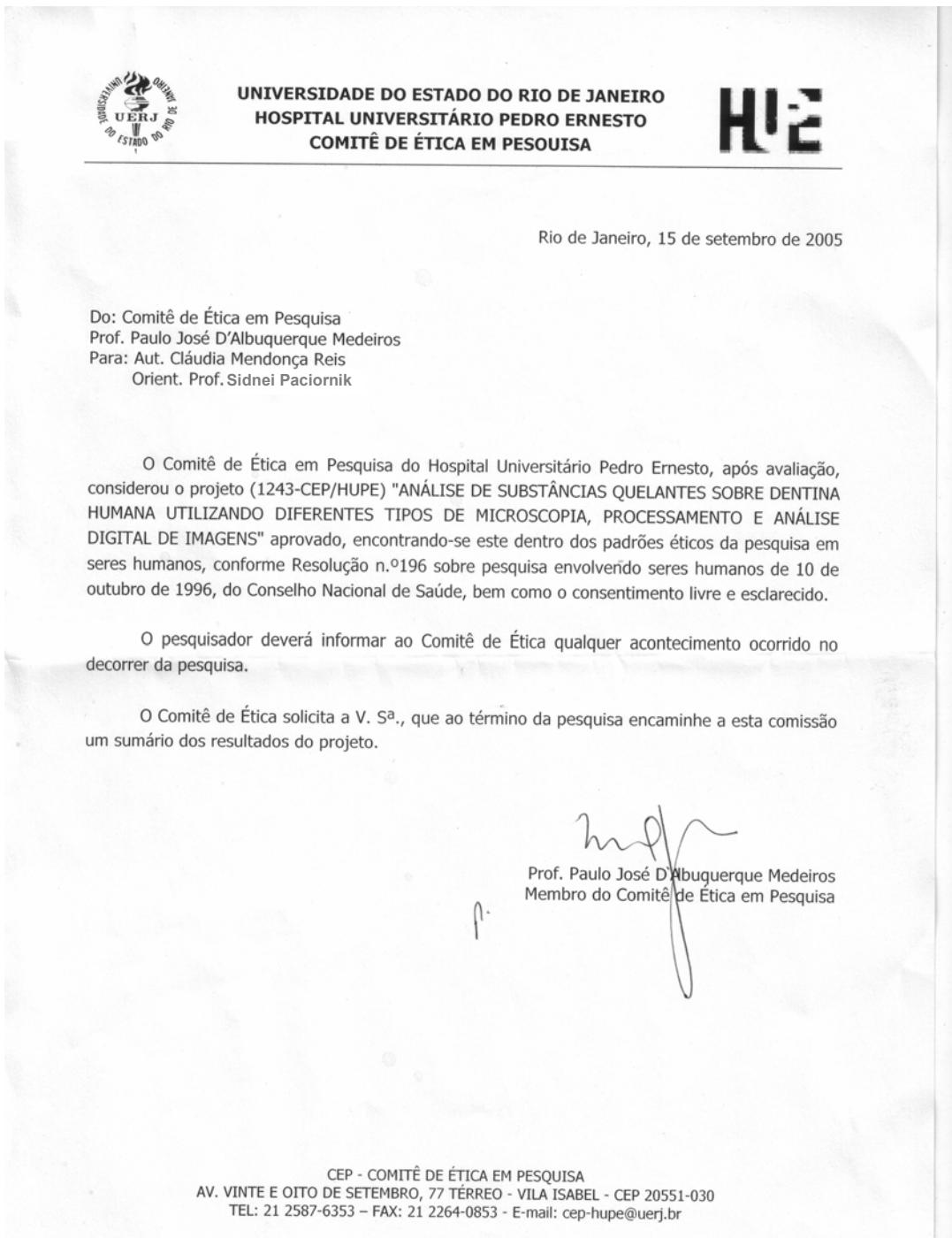


7 Apêndice I

7.1 Aprovação do Comitê de Ética



8 Apêndice II

8.1 Macro Desenvolvida (linguagem proprietária do KS400)

```

# Limpar o display e o plano gráfico
imgdelete "*.*"
Gclear 0

# Escolher o tempo de ataque ácido das imagens a serem processadas
tempo = ""
read tempo, "Entre com o tempo de ataque (15, 30, 60, 180, 300, 600):"

# Define o diretório de origem das imagens
path = "//imagens3/users/claudia/dentina/ac/ac10%/am2/" + tempo + "seg"
imgsetpath path
DBsetpath path

# Define os parâmetros utilizados
MSsetprop "REGIONFEAT", "AREA, DCIRCLE, FERETMAX, FERETMIN,
FERETRATIO"
MSsetprop "REGIONFEAT", ",,FCIRCLE,"
MSsetprop "REGIONFEAT", ",,SOLIDEZ = AREA/AREAF, CONVEXIDADE"
MSsetprop "FIELDFEAT", "FLDCOUNT, FLDAREAP"
MSsetprop "DRAWFEAT", "DRCONTOURU"
MSsetprop "CONNECT",4

# Calibra as imagens
LMDescalaoptico 3,5,"1300",0,0

#Define o tamanho dos objetos a serem medidos
scrapmin = 30

```

```

scrapmax = 15000
size = 30
offset = 0

# Apaga a base de dados
if (DBexist ("REGION")) : DBdelete "REGION"
if (DBexist ("FIELD")) : DBdelete "FIELD"

# Loop para processamento de todas as imagens do diretório de origem
image = path + "/*.tif"
i=1
while 1
    imgenum image, 1
    if (not _STATUS): break
    imgload image,1
# Define o tamanho da imagem para definir se os objetos que tocam as bordas
devem ou não ser medidos
    imgstatus image, tamx, tamy
    MSsetprop "FRAMESTARTX",1
    MSsetprop "FRAMESTARTY",1
    MSsetprop "FRAMESIZEX", tamx-2
    MSsetprop "FRAMESIZEY", tamy-2
# Pré-processamento
    highpass 1,2,49,5,2
    normalize 2,3
# Segmentação Automática
    disaut 3,4,1,1
# Pós-Processamento
    binscrap 4,5,scrapmin,scrapmax,1
    Gclear 0
    MSdrawmask 5,1
    imgdisplay 3
    update
# Se a segmentação não for adequada faz-se a segmentação adaptativa

```

```

dis = "s"
read dis, "Segmentação OK ? (s/n)"
if (dis == "n")
    ! extdisdyn 3,4, size, offset. 1
    binscrap 4,5,scrapmin,scrapmax,1
    Gclear 0
    MSdrawmask 5,1
    imgdisplay 3
endif

# Separação dos objetos que se tocam
bineuclidclose 5,6,2
binfill 6,7
Gclear 0
grainsbin 7,8,2,3,1,12
binand 5,8,9
Gclear 0

# Ver se o PADI funcionou na imagem e incluir os dados na base de daos
MSdrawmask 9,1
imgdisplay 3
resp = "s"
read resp, "Deseja incluir este campo ? (s/n)"
if (resp == "s")
    MSsetprop "FRAMEMODE",1
    MSmeasmask 9,1,string(i),0,1,10
    MSmeasmask 9,1,"REGION",1,1,10
    MSsetprop "FRAMEMODE",0
    MSmeasmask 9,1,"FIELD",1,2,10
endif
i = i +1
endwhile

# Mostra as bases de dados
datalist "FIELD",0,1
datalist "REGION",0,1

```

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