

These scripts are called and executed here

main executing script



biexp_main.m



read_images.m



generate_mask.m



fit_biexp_images.m



fit_biexp.m



working direction

TASK: Values which are added in here must be added here (look up details in the next two pages)

```

    %[i j]
    % Perform fitting to image data.
    Y = squeeze(img_vol(j,i,:))'; % Time activity curve, or decay data
    %time_stamps=[5 10 15 20 30];%time_stamps=5:10:15:20:30;%:
40:50:60:70:80:90
    %TR=1;

    [pa,fval,exfl]=fminsearch(@(x)fit_biexp(x,TR,Y,time_stamps),startingvals,opts);
    %if img_fitted(:,:,3)<10
    %    img_fitted(:,:,3) = 2;
    %end
    for k=1:length(startingvals)
    img_fitted(j,i,k) = pa(k);
    end

    end
end
end
close(h)

```

This values should be in the
biexp_main.m



Name fit_biexp_images.m

Kind MATLAB Code

Size 2 KB

Created Sonntag, 29. Juni 2014 22:39

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```
function diff = fit_biexp(x,TR,Y,time_stamps)
% This function is called by lsqnonlin.
% MZ = A + B.*exp(-TR./T1)./(1+cos(FA).*exp(-TR./T1))

%start unknown variable
A=x(1);
B=x(2);
T1=x(3);
%end unknown variable
%size(Y)
%size( ((A+B.*exp(-TR./T1))./(1+cos(time_stamps).* exp(-TR./T1))) )
diff = sum(((A+B.*exp(-TR./T1))./(1+cos(time_stamps).* exp(-TR./T1)))-Y).^2);
end
```

This values should
be
entered in the

Name fit_biexp.m

Kind MATLAB Code

Size 383 bytes

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