

## 2-D DIGE COURSE



**CCMar – University of the Algarve**

**13 – 15 October 2009**

It is known that two-dimensional difference gel electrophoresis (2-D DIGE) has strengthened the 2-D platform with the detection and quantification of differences between samples resolved in the same gel, or across multiple gels, linked by an internal standard. This technology brings new frontiers to standard 2-D electrophoresis with high level of reproducibility, reducing the number of false positives, less protein concentration and gel number.

The course will be focused on theoretical description of this technique as well as bench work, with participants encourage to bring their own samples.

### INFORMATION

**Instructor:** Drº Bruno Bacher

European Application Specialist Proteomic

GE Healthcare, Life Sciences

**Venue:** CCMar, University of Algarve

Laboratory of functional and comparative proteomics

**Fee:** 300 Euros

**Contact person:** Pedro Rodrigues (pmrodrig@ualg.pt)

## PROGRAM

<b>Theory / Lecture</b>	<b>Day 1</b>	<b>Practice / Lab</b>	<b>Instruments</b>
Pre-preparation of samples (prior to Workshop)		sample preparation/precipitation Quantification Rehydration of IPGstrips	<i>2D Clean-up</i> <i>2D Quant kit</i> <i>IPGDryStrip</i>
<b>Lunch</b>			
Introduction		DIGE labelling START 1st Dim: IEF End	<i>Ettan IPGphor</i>
Troubleshooting IEF			
<b>Theory / Lecture</b>	<b>Day 2</b>	<b>Practice / Lab</b>	<b>Instruments</b>
		Equilibration after IEF Load 2nd Dimension	<i>Ettan Dalt six</i>
<b>Break</b>		<b>Break</b>	
Sample preparation DIGE Workflow Overview Experimental Design			
<b>Lunch</b>		<b>Lunch</b>	
Experimental Design		Stop 2nd Dimension Opt. Image Acquisition parameter Image Scan End	<i>Typhoon</i>
<b>Theory / Lecture</b>	<b>Day 3</b>	<b>Practice / Lab</b>	<b>Instruments</b>
DeCyder DIA basics			<i>DeCyder Software</i>
<b>Break</b>		<b>Break</b>	
DeCyder Batch processor DeCyder BVA basics			<i>DeCyder Software</i> <i>DeCyder Software</i>
<b>Lunch</b>		<b>Lunch</b>	
DeCyder EDA Results & troubleshooting			<i>DeCyder Software</i>