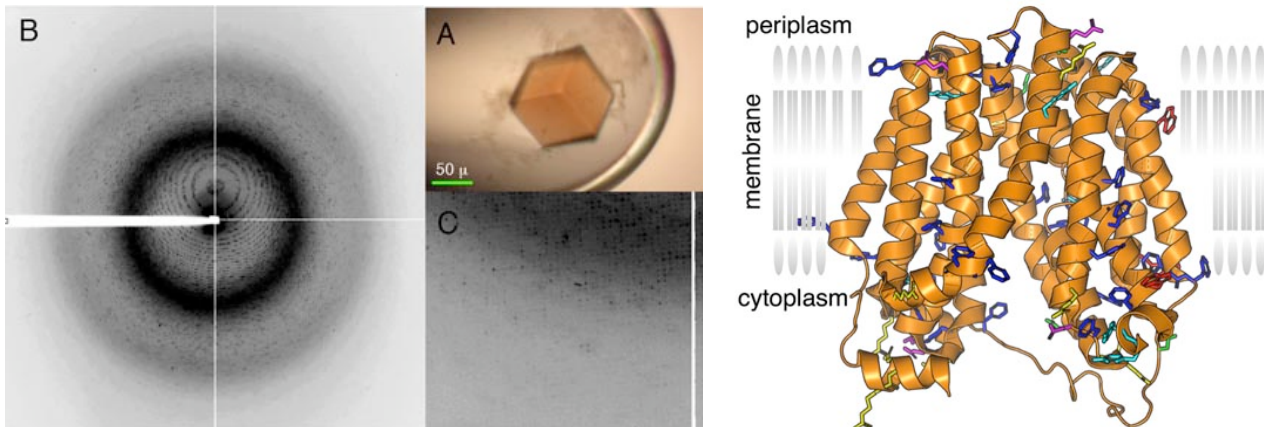


Applications are invited for the  
**Workshop on Membrane Protein  
Crystallisation and Crystallography**

Sponsored by EMBN-Train & E-MeP-Lab  
to be held at Diamond Light Source  
**1<sup>st</sup> – 3<sup>rd</sup> April, 2008**

Hosted by Dr Bernadette Byrne and Dr Liz Carpenter

This workshop brings together renowned scientists expert in the handling, crystallisation and structure determination of membrane proteins. The workshop is being held in the unique environment of the Diamond Light Source and will include lectures, demonstrations and poster sessions. Participants are strongly encouraged to discuss their own research interests during the course.



**Some of the topics covered:**

**Membrane protein solubilisation and stability, High-throughput solubilisation and purification, Rational membrane protein screen design, Lipidic cubic phase crystallisation**

**Data collection with synchrotron radiation with difficult crystals, Solving membrane protein structures, Robotics and high throughput crystallisation**

At least part of the cost of attending the course will be covered by EMBN-Train and E-MeP lab training grants.

Applications to attend the course should be sent to Bernadette Byrne, [b.byrne@imperial.ac.uk](mailto:b.byrne@imperial.ac.uk). Please send brief details of your experience to date, current research project and which areas you would particularly like to be covered during the course.

Attendance will be limited to 30 participants. Please send your applications by 15th Feb, 2008 at the latest.

### Workshop on membrane protein crystallisation and crystallography

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Preliminary programme-subject to alteration		
<b>1<sup>st</sup> April 2008</b> <b>Tuesday</b>	<b>Workshop day 1 – expression and purification</b>	
9.30 – 10.30	Simon Newstead	GFP-fusions: a membrane protein pipeline
<b>10.30 – 11.00</b>	<b>Tea and coffee</b>	
11.00 - 12.00	Paula Booth	Detergents and lipids
12.00 – 1.00	Said Eshagi	High throughput solubilisation and purification
<b>1.00 – 2.00</b>	<b>Lunch</b>	
<b>2.00 – 2.45</b>	Dr Kostas Beis	Case study: The structure determination of the <i>E. coli</i> translocon, Wza.
<b>2.45 – 3.30</b>	Said Eshagi	Case study:
<b>3.30 - 4.00</b>	<b>Tea and coffee</b>	
<b>4.00 - 5.00</b>	Participants	Short presentations
<b>5.00 - 6.00</b>	Posters	Drinks
7.00 – 7.30	Coaches to local restaurant	
7.30 – 9.00	Dinner in local pub/restaurant	
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<b>2<sup>nd</sup> April 2008</b> <b>Wednesday</b>	<b>Workshop day 2</b>	<b>Membrane protein crystallisation</b>
9.00 – 9.45	Simon Newstead	Crystallisation screens
9.45 – 10.30	Liz Carpenter	Robotics and high throughput crystallisation in the MPL at Diamond
10.30 – 11.00	Coffee/Tea	
11.00 – 12.00	Martin Caffrey	Lipidic cubic phase crystallisation
12.00 – 1.00	Bjorn Pedersen	Issues involved in structure determination of the calcium, sodium-potassium and proton pumps
<b>1.00 – 2.00</b>	<b>Lunch</b>	

2.00 – 2.45	Bjorn Pedersen	Case study: Structure determination of the H <sup>+</sup> -ATPase
2.45 – 4.15	Demonstrations and tours of Diamond and the MPL	
4.15 - 4.45	Tea and Coffee	
4.45 - 5.45	Participants	Short presentations
6.15 – 6.45	Coach to Oxford	
6.45 – 8.00	Stroll around Oxford	
7.30 – 9.00	Dinner in restaurant in Oxford	

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**3<sup>rd</sup> April 2008  
Thursday**

**Workshop day 3 - Data collection**

9.00 – 9.30	Gwyndaf Evans	Data collection with synchrotron radiation with difficult crystals
9.30 – 10.30	Susanna Tornroth Horsefield	Handling membrane protein diffraction data
	Coffee/Tea	
11.00 – 11.45	Gebhard Schertler	Microcrystallography: data collection on small membrane protein crystals
11.45 – 12.30	Susanna Tornroth Horsefield	Case study
12.30 – 1.30	Lunch	
1.30 – 2.15	Richard Cogdell	TBC
2.15 – 3.00		Quiz
3.00 – 3.15		Tea
3.15 – 3.30		Course assessment
3.30 – 3.45		Poster Prizes
3.45 – 4.00		Taxis leave for trains/planes etc.

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