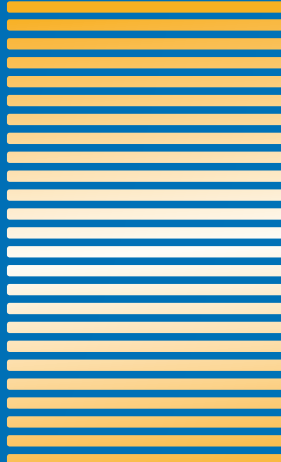
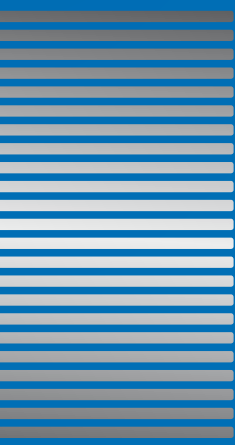




# 63. MOSBACHER KOLLOQUIUM



POST-TRANSLATIONAL MODIFICATIONS  
IN SIGNAL INTEGRATION AND  
MOLECULAR THERAPIES

29 - 31 MARCH 2012

# PROGRAM

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Dear Colleague,

The spring meetings of the German Society for Biochemistry and Molecular Biology (GBM) are held annually in the picturesque town of Mosbach to promote the exchange of scientific ideas and education of young scientists. The scientific theme of the 63rd meeting is focused on post-translational modifications and signal integration.

Due to improved detection technologies, the list of reported protein modifications has risen to well over 200. A crucial aspect of signalling through PTMs is the presence of modular protein domains that recognize particular types of PTMs. This coupling of modification with a corresponding recognition domain creates an attractive “decoding” mechanism for monitoring and responding to alterations in the cellular microenvironment. The biological significance of PTMs has also come a long way from the classical descriptions of their role in regulating a variety of cellular processes to the pharmacological use in designing novel molecular therapies.

At the meeting, the common principles of post-translational modifications and their importance in signal integration in the context of a wide variety of cellular responses will be discussed. The interdisciplinary spectrum of talks including structural biology, biochemistry, molecular and cellular biology, genetics and translational medicine is incorporated.

This year's meeting is also supported by the Cluster of Excellence Frankfurt Macromolecular Complexes.

We look forward to welcoming you in Mosbach.

Amparo Acker-Palmer  
Ivan Dikic  
Volker Dötsch



# PROGRAM AT A GLANCE

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## WEDNESDAY, 28 MARCH

17:00 - 20:00	Arrival and registration
20:00 - 22:00	Get-together and welcome reception

## THURSDAY, 29 MARCH

08:40 - 09:00	Opening remarks: President GBM / Scientific organizers
09:00 - 10:40	<b>Session 1:</b> <b>Detection and analysis of PTM</b> Tony Hunter, San Diego (US) Ruedi Aebersold, Zurich (CH) Gerald Hart, Baltimore (US)
10:45 - 11:15	Coffee break
11:15 - 12:20	<b>Session 2:</b> <b>PTM in control of signalling</b> John Kuriyan, Berkley (US) Carmen Birchmeier-Kohler, Berlin (DE)
12:30 - 13:30	Lunch break
12:30 - 13:30	Meet the Prof
13:30 - 15:00	Poster Session 1
15:00 - 16:05	<b>Session 2:</b> <b>PTM in control of signalling</b> Soichi Wakatsuki, Tsukuba (JP) Manolis Pasparakis, Cologne (DE)
16:10 - 16:40	Coffee break
16:40 - 17:00	Bayer HealthCare PhD Prize: Hannes Mutschler, Heidelberg (DE)
17:00 - 19:00	GBM General Meeting
19:00 - 19:40	Feodor Lynen Lecture: Matthias Mann, Munich (DE)
20:00 - 21:30	Lynen reception
21:30 - 24:00	Party & Dance (org. by Junior GBM)

## FRIDAY, 30 MARCH

09:00 - 10:40	<b>Session 3:</b> <b>Quantitative aspects of Signal Integration</b> Ursula Klingmüller, Heidelberg (DE) Alfred Wittinghofer, Dortmund (DE) Krishna Rajalingam, Frankfurt (DE)
10:45 - 11:15	Coffee break
11:15 - 12:20	<b>Session 3:</b> <b>Quantitative aspects of Signal Integration</b> Doug Lauffenburger, Boston (US) Philippe Bastiaens, Dortmund (DE)
12:30 - 13:30	Lunch break
12:30 - 13:30	<b>Meet the Prof</b>
13:30 - 15:00	Poster Session 2
15:00 - 16:05	<b>Session 4:</b> <b>Signal integration in inflammation and cell fate specification</b> Joseph Penninger, Vienna (AT) Christian Pohl, Frankfurt (DE)
16:10 - 16:40	Coffee break
16:40 - 17:10	<b>Session 4:</b> <b>Signal integration in inflammation and cell fate specification</b> Frauke Melchior, Heidelberg (DE)
17:15 - 18:15	<b>Otto Warburg medal and lecture:</b> Alexander Varshavsky, Pasadena (US)

## SATURDAY, 31 MARCH

09:00 - 10:40	<b>Session 5:</b> <b>PTM and molecular therapies</b> Sara Courtneidge, La Jolla (US) Carl-Henrik Heldin, Uppsala (SE) Gerry Melino, Leicester (UK)
10:45 - 11:15	Coffee break
11:15 - 12:20	<b>Session 5:</b> <b>PTM in control of signalling</b> Joseph Schlessinger, New Haven (US) Pier Paolo Di Fiore, Milan (IT)
12:30 - 12:45	Poster Prizes and closing remarks



Alte Maelzerei/Congress venue



## WEDNESDAY, 28 MARCH

17:00 - 20:00

Arrival and registration

20:00 - 22:00

Get-together and welcome reception  
(in the city hall)

City hall/Mosbach



## DAY OF ARRIVAL

The Steering Committee of the German Society for Biochemistry and Molecular Biology (Gesellschaft für Biochemie und Molekularbiologie, GBM) and the city of Mosbach invite you to a welcome reception at 8.30 p.m. in the city hall (Rathaus, Marktplatz/ Hauptstraße) in Mosbach (to end about 10 p.m. - no registration required)

We thank the city of Mosbach for the kind hospitality.

## THURSDAY, 29 MARCH

08:40 - 09:00	Opening remarks: <b>Irmgard Sinning</b> (President of GBM) <b>Ivan Dikic</b> (Organizing Committee)
	Session 1 (Chair: I. Dikic) Detection and analysis of PTM
09:00 - 09:35	<b>Tony Hunter</b> , San Diego (US) <i>Protein phosphorylation: the global picture</i>
09:35 - 10:10	<b>Ruedi Aebersold</b> , Zurich (CH) <i>Kinase-substrate net</i>
10:10 - 10:45	<b>Gerald Hart</b> , Baltimore (US) <i>Surprisingly extensive crosstalk between O-GlcNAcylation &amp; phosphorylation</i>
10:45 - 11:15	Coffee break
	Session 2 (Chair: R. Goody) PTM in control of signalling
11:15 - 11:50	<b>John Kuriyan</b> , Berkley (US) <i>Structural mechanisms in the regulation of the EGF receptor</i>
11:50 - 12:25	<b>Carmen Birchmeier-Kohler</b> , Berlin (DE) <i>Nrg1/ErbB signaling in development</i>
12:30 - 13:30	Lunch break
12:30 - 13:30	Meet the Prof
13:30 - 15:00	Poster Session 1
	Session 2: (Chair: R. Goody) PTM in control of signalling
15:00 - 15:35	<b>Soichi Wakatsuki</b> , Tsukuba (JP) <i>Structural insights into linear ubiquitin chain formation and recognition</i>
15:35 - 16:10	<b>Manolis Pasparakis</b> , Cologne (DE) <i>Epithelial regulation of immune homeostasis and inflammation in barrier surfaces</i>



## THURSDAY, 29 MARCH

16:10 - 16:40	Coffee break
16:40 - 17:00	<b>Bayer HealthCare PhD Prize:</b>  <b>Hannes Mutschler</b> , Heidelberg (DE) <i>Toxic turnover: how zeta toxins corrupt bacterial cell wall synthesis</i>
17:00 - 19:00	<b>GBM General Meeting</b>
19:00 - 19:40	<b>Feodor Lynen Lecture:</b>  <b>Matthias Mann</b> , Munich (DE) <i>High resolution mass spectrometry for the functional study of the proteome</i>
20:00 - 21:30	Lynen reception
21:30 - 24:00	Party & Dance (org. by Junior GBM)

## FRIDAY, 30 MARCH

	<b>Session 3:</b> (Chair: U. Klingmüller) <b>Quantitative aspects of Signal Integration</b>
09:00 - 09:35	<b>Ursula Klingmüller</b> , Heidelberg (DE) <i>Information processing through the erythropoietin receptor network</i>
09:35 - 10:10	<b>Alfred Wittinghofer</b> , Dortmund (DE) <i>Posttranslational modification and spatio-temporal regulation of Ras proteins</i>
10:10 - 10:45	<b>Krishna Rajalingam</b> , Frankfurt (DE) <i>The other side of Inhibitors of Apoptosis: ubiquitin dependent regulation of cell migration</i>
10:45 - 11:15	Coffee break



## FRIDAY, 30 MARCH

	<p>Session 3: (Chair: U. Klingmüller) Quantitative aspects of Signal Integration</p>
11:15 - 11:50	<p><b>Doug Lauffenburger</b>, Boston (US) <i>Computational Analysis of Phosphoproteomic Data for Elucidating Molecular Network Interactions</i></p>
11:50 - 12:25	<p><b>Philippe Bastiaens</b>, Dortmund (DE) <i>The wanderings of the proto-oncogene product Ras</i></p>
12:30 - 13:30	Lunch break
12:30 - 13:30	Meet the Prof
13:30 - 15:00	Poster Session 2
	<p>Session 4: (Chair: V. Dötsch) Signal integration in inflammation and cell fate specification</p>
15:00 - 15:35	<p><b>Joseph Penninger</b>, Vienna (AT) <i>Haploid stem cells as tools for functional genomics</i></p>
15:35 - 16:10	<p><b>Christian Pohl</b>, Frankfurt (DE) <i>Morphogenetic signaling in the <i>C. elegans</i> embryo</i></p>
16:10 - 16:40	Coffee break
	<p>Session 4: (Chair: V. Dötsch) Signal integration in inflammation and cell fate specification</p>
16:40 - 17:15	<p><b>Frauke Melchior</b>, Heidelberg (DE) <i>Sumoylation in oxidative stress</i></p>
17:15 - 18:15	<p>Otto Warburg medal and lecture: <b>Alexander Varshavsky</b>, Pasadena (US) <i>Recent Discoveries About the Ubiquitin System and the N-End Rule Pathway</i></p>



## SATURDAY, 31 MARCH

	<p>Session 5: (Chair: A. Acker-Palmer) PTM and molecular therapies</p>
09:00 - 09:35	<p><b>Sara Courtneidge</b>, La Jolla (US) <i>The control of cell invasion in development and disease</i></p>
09:35 - 10:10	<p><b>Carl-Henrik Heldin</b>, Uppsala (SE) <i>Signaling via TGF-<math>\beta</math> receptors</i></p>
10:10 - 10:45	<p><b>Gerry Melino</b>, Leicester (UK) <i>p73 induces ageing via metabolic control</i></p>
10:45 - 11:15	Coffee break
	<p>Session 5: (Chair: A. Acker-Palmer) PTM and molecular therapies</p>
11:15 - 11:50	<p><b>Joseph Schlessinger</b>, New Haven (US) <i>Cellular signaling by receptor tyrosine kinases</i></p>
11:50 - 12:25	<p><b>Pier Paolo Di Fiore</b>, Milan (IT) <i>Endocytosis, Stem cells and Cancer</i></p>
12:30 - 12:45	<p>Poster Prizes and closing remarks <b>Roger Goody</b> (GBM Vicepresident) <b>Volker Dötsch</b> (Organizing Committee) <b>Irmgard Sinning</b> (GBM President)</p>





## MEET THE PROF

Once again the Junior GBM will organize the established event „Meet the Prof“ with successful speakers from science and research.

Guests:

Thu., 29 March, 12.30 - Rm. Darre

(Chair: Niklar Laasch)

**Matthias Mann**, Munich (DE)

Fri., 30 March, 12:30 - Rm. Darre

(Chair: Jens Einloft)

**Alexander Varshavsky**, Pasadena (US)

In an informal atmosphere, you've got the chance to ask the question which keeps you up at night - e.g. How do I make a career in science? Did the speaker have fun on his/her own way and which experiences were helpful? You are welcome to join and ask further questions.

## PARTY AND DANCE

The students committee of the German Society for Biochemistry and Molecular Biology is organizing an informal get-together with dance.

Date:

Thursday, 29 March 2012, 9.30 p.m.

(after Lynen reception)

Hopfen Keller (Alte Mälzerei)

no registration required

### WELCOME RECEPTION

The Steering Committee of the German Society for Biochemistry and Molecular Biology (Gesellschaft für Biochemie und Molekularbiologie, GBM) and the city of Mosbach invite you to a welcome reception at 8.30 p.m. in the city hall (Rathaus, Marktplatz / Hauptstraße) in Mosbach (to end about 10 p.m.)

We thank the city of Mosbach for the kind hospitality.

Date:

Wednesday, 28 March 2012, 8.30 p.m.

Town hall, (Rathaus, Marktplatz / Hauptstraße)

no registration required

### LYNEN RECEPTION

The GBM Steering Committee invites you to a reception in honor of Feodor Lynen after the Lynen Lecture.

Date:

Thursday, 29 March 2012, 8.00 p.m.

Alte Mälzerei

no registration required

## ACCOMMODATION

Accommodation can be booked through Städtisches Verkehrsamt (Tourist office) . Please use the accommodation form at the meeting website.

You will receive confirmation by mail.

For further questions concerning hotel reservation please contact the tourist information (Tel. +49 6261-9188-20, Fax -15, Email [tourist.info@mosbach.de](mailto:tourist.info@mosbach.de)).

## CONFERENCE OFFICE

Opening hours:

Wed., 28 March	05.00 p.m. - 08.00 p.m.
Thu., 29 March	08.00 a.m. - 04.30 p.m.
Fri., 30 March	08.30 a.m. - 04.30 p.m.
Sat., 31 March	08.30 a.m. - 11.00 a.m.

Telephone and Fax numbers of the conference office (28 - 31 March 2012) are:

Tel. +49 (0) 6261 9292-78,  
Fax. +49 (0) 6261 9292-79

## INTERNET

There will be a wireless LAN access point in the foyer next to the conference office.

SSID: AM            Username: gbm  
                         Password: 2012

### LUNCH & COFFEE BREAKS

Coffee, tea and mineral water will be provided for free during the coffee breaks.

Lunch is available at your own expense in the conference center or you can also visit one of the restaurants in the town of Mosbach.

### POSTERS

Posters should be presented throughout the whole meeting.

There will be poster discussion sessions on Thursday and Friday afternoon. During the poster sessions the presenting authors are requested to stay near their posters.

The best three posters will be awarded.

The winners will be announced by the end of the Kolloquium on Saturday.

Please see the abstract book for poster numbers and authors.

The posters should be presented in Portrait format (DIN A0 resp. ~120 x 85 cm)

### CONFERENCE OFFICE

Please visit the booths of our industrial sponsors:

Biomol GmbH

Deutsche Forschungsgemeinschaft (DFG)

F. Hoffmann-La Roche AG

IRIS Biotech GmbH

New England Biolabs GmbH

Springer Verlag/Biospektrum

Verlag Walter de Gruyter/Biological Chemistry

## REGISTRATION

Registration fees:

	early	late/onsite
members* academia	195 €	225 €
non-members academia	270 €	300 €
undergraduate members*	40 €	50 €
undergraduate non-members	65 €	75 €
graduate members*	65 €	75 €
graduate non-members	90 €	100 €
retiree members*	100 €	110 €
retiree non-members	145 €	155 €
industry	350 €	380 €

\*Member of the GBM, VAAM, DGZ, Dechema

Please register online at the meeting homepage.

The registration fee includes coffee/tea/mineral water during the conference breaks.

Please note the payment terms described in the registration confirmation email. With a payment later than 29 February 2012 your registration cannot be accepted as early registration.

After 29 February 2011 the registration fee cannot be refunded.

If you want to join the GBM with your registration to enjoy the reduced participation fee, please fill in the membership application form and send it to the GBM head office.

## PROCEEDINGS

Your name badge, program, abstract booklet are available at the registration desk.

We kindly ask to wear your name badge as an entry ticket during the whole meeting.

## VENUE - MOSBACH

Mosbach is located on the railway line (S-Bahn) Mannheim-Heidelberg-Mosbach-Osterburken, 45 kilometres east of Heidelberg.

The nearest airport is Frankfurt/Main. There are good train connections from Frankfurt airport station to Mannheim and from there to Mosbach.

By car:

From Frankfurt / Heidelberg: Motorway A6  
exit Sinsheim - then B292 to Mosbach

From Stuttgart / Heilbronn:

A6 exit Neckarsulm - B27 to Mosbach

From Würzburg / Nürnberg:

A81 exit Osterburken, B 292 to Mosbach.

## VENUE - ALTE MAELZEREI

The congress center is located just above the old city centre.

When arriving by car, please follow the yellow signs to parking areas P5 „Alte Mälzerei“ or P6 „Altstadt“.

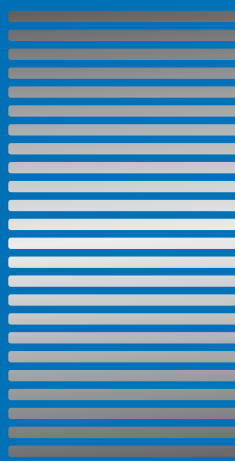
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[WWW.GBM-ONLINE.DE](http://WWW.GBM-ONLINE.DE)