



# 10th International Conference on the Biology, Chemistry and Therapeutic Applications of Nitric Oxide

Sunday 16 - Thursday 20 September 2018  
Oxford, UK

Abstract deadline: Wednesday 2 May  
Early bird registration deadline: Monday 2 July

no2018.org.uk

## PROGRAMME

### Sunday 16 September

16:00 – 18:00	REGISTRATION	Keble College
19:00 – 21:00	<b>WELCOME DRINKS RECEPTION</b>	Museum of Natural History
19:15 – 19:20	<b>Welcome and introduction</b> Mark CRABTREE (UK) and Philip JAMES (UK)	
19:20 – 20:00	<b>Welcome address and PLENARY 1</b> NITRIC OXIDE: A Truly Remarkable Molecule Louis IGNARRO (USA)	

### Monday 17 September

07:00 – 08:30	Residents Breakfast	Keble College Dining Hall
07:30 – 08:30	REGISTRATION	Maths Institute
08:30 – 09:20	LT1	
	Chair: Keith CHANNON (UK)	
	<b>PLENARY 2: Ferid MURAD (USA)</b>	
09:20 – 09:30	Transfer to parallel sessions	
09:30 – 10:45	LT1	LT2
	<b>Session 1: Translational sGC</b>	<b>Session 2: NOS Biochemistry - Regulation and Signaling Physiology</b>
	Co-Chairs: Adrian HOBBS (UK) + John GARTHWAITE (UK)	Co-Chairs: Miriam CORTESE-KROTT (GERMANY) + Jay ZWEIER (USA)
	09:30 – 09:50 Peter SANDNER (GERMANY) 09:50 – 10:10 Todd MILNE (USA) 10:10 – 10:30 Thorsten KESSLER (GERMANY) 10:30 – 10:45 TBC	09:30 – 09:50 Bill SESSA (USA) 09:50 – 10:10 Brant ISAKSON (USA) 10:10 – 10:30 Swapli SOKUSARE (USA) 10:30 – 10:45 TBC
10:45 – 11:15	Refreshments, exhibition, posters + networking	
11:15 – 12:45	LT1	LT2
	<b>Session 3: Clinical/Translational NO</b>	<b>Session 4: NOS Biochemistry - Structural and Functional Biochemistry</b>
	Co-Chairs: Jon LUNDBERG (SWEDEN) + Bruce FREEMAN (USA)	Co-Chairs: Dennis STUEHR (USA) + Ingrid FLEMING (GERMANY)
	11:15 – 11:45 Amrita AHLUWALIA (UK)  11:45 – 12:15 Sruti SHIVA (USA) Nitrite dependent regulation of mitochondrial function  12:15 – 12:30 TBC 12:30 – 12:45 TBC	11:15 – 11:45 Nigel SCRUTTON (UK) 11:45 – 12:15 Yoichi OSAWA (USA) 12:15 – 12:30 TBC 12:30 – 12:45 TBC

12:45 – 14:00	Lunch, exhibition, MODERATED poster session + networking Co-Chairs: <i>Miriam CORTESE-KROTT</i> (GERMANY) + <i>Annarita DI LORENZO</i> (USA)	
14:00 – 15:45	<i>LT1</i>	<i>LT2</i>
	<b>Session 5: Infection and Inflammation</b>	<b>Session 6: Species Interaction and Persulfides</b>
	Co-Chairs: <i>Christian BOGDAN</i> (GERMANY) + <i>Ferric FANG</i> (USA)	Co-Chairs: <i>Martin FEELISCH</i> (UK) + <i>Peter NAGY</i> (HUNGARY)
	14:00 – 14:30 <i>Christian BOGDAN</i> (USA) 14:30 – 15:00 <i>Ferric FANG</i> (USA) 15:00 – 15:30 <i>Lalli RAMAKRISHNAN</i> (UK) 15:30 – 15:45 TBC	14:00 – 14:30 <i>Takaaki AKAIKE</i> (JAPAN) 14:30 – 15:00 <i>Jon FUKUTO</i> (USA) 15:00 – 15:30 <i>Fumito ICHINOSE</i> (USA) 15:30 – 15:45 TBC
15:45 – 16:15	Refreshments, exhibition, posters + networking	
16:15 – 18:00	<i>LT1</i>	<i>LT2</i>
	<b>Session 7: Immunology / Metabolism / Immunometabolism</b>	<b>Session 8: R-SNO R-NNO and other PTMS</b>
	Co-Chairs: <i>David WINK</i> (USA) + <i>Dan McVICAR</i> (USA)	Co-Chairs: <i>Greg THATCHER</i> (USA) + <i>Steven GROSS</i> (USA)
	16:15 – 16:45 <i>Victor UMANSKY</i> (GERMANY) 16:45 – 17:15 <i>David WINK</i> (USA) 17:15 – 17:45 <i>Dan McVICAR</i> (USA) 17:45 – 18:00 <i>Jade BAILEY</i> (UK)	16:15 – 16:45 <i>Chris KEVIL</i> (USA)  16:45 – 17:15 <i>Moran BENHAR</i> (ISRAEL) Nitroso-redox stress-induced cancer cell death: new insights from functional and proteomic studies  17:15 – 17:45 <i>Jonathan STAMLER</i> (USA)  17:45 – 18:00 <i>Joy SMITH</i> (London, UK) Sulforaphane-mediated inhibition of SHP2 as a potential pharmacotherapy for Noonan syndrome
18:00	Meeting close Day One	
18:00 – 19:00	<b>Elsevier Executive Board meeting</b>	
19:00	<b>Residents Dinner</b>	<i>Keble College Dining Hall</i>
23:00	<b>Keble College bar closes</b>	

## Tuesday 18 September

07:00 – 08:30	<b>Residents Breakfast</b>	<i>Keble College Dining Hall</i>
07:30 – 08:30	REGISTRATION	<i>Maths Institute</i>
08:30 – 09:20	<i>LT1</i>	
	Chair: <i>Amrita AHLUWALIA</i> (UK)	
	<b>PLENARY 3: <i>Salvador MONCADA</i></b> (UK)	
09:20 – 09:30	Transfer to parallel sessions	
09:30 – 10:45	<i>LT1</i>	<i>LT2</i>
	<b>Session 9: Ischemia / Hypoxia</b>	<b>Session 10: Diabetes and Obesity</b>
	Co-Chairs: <i>Harald SCHMIDT</i> (THE NETHERLANDS) + <i>Tienush RASSAF</i> (GERMANY)	Co-Chairs: <i>Justin PERCIVAL</i> (USA) + <i>Charalambos ANTONIADES</i> (UK)
	09:30 – 09:50 <i>Matthias TOTZECK</i> (GERMANY) 09:50 – 10:10 <i>Andreas DAIBER</i> (GERMANY) 10:10 – 10:30 <i>Ingo HILGENDORF</i> (GERMANY) 10:30 – 10:45 TBC	09:30 – 09:50 <i>Charley LAI</i> (USA) 09:50 – 10:10 <i>Justin PERCIVAL</i> - tbc 10:10 – 10:30 <i>Mark KEARNEY</i> (UK) 10:30 – 10:45 TBC
10:45 – 11:15	Refreshments, exhibition, posters + networking	

11:15 – 12:45	<i>LT1</i>	<i>LT2</i>
	Session 11: Mitochondria and metabolism	Session 12: Redox-pathway control 
	Co-Chairs: <i>Sruti SHIVA</i> (USA) + <i>Edward CHOUCANI</i> (USA)	Co-Chairs: <i>Phil EATON</i> (UK) + <i>Neill HOGG</i> (USA)
	11:15 – 11:45 <i>Harry ISCHIROPOULOS</i> (USA) 11:45 – 12:15 <i>Stuart LIPTON</i> (USA)  12:15 – 12:30 <i>Mark KOHR</i> (USA) S-nitrosoglutathione reductase is essential for protecting the female heart from ischemia-reperfusion injury  12:30 – 12:45 <i>Edward CHOUCANI</i> (USA)	11:15 – 11:45 <i>Roland STOCKER</i> (AUSTRALIA) Regulation of vascular tone and blood pressure in inflammation by indoleamine 2,3-dioxygenase-mediated formation of singlet molecular oxygen  11:45 – 12:15 <i>Yvonne JANSSEN-HEININGER</i> (USA) 12:15 – 12:30 <i>Francisco Jose SCHOPFER</i> (USA) 12:30 – 12:45 <i>Neill HOGG</i> (USA)
12:45 – 14:45	Lunch, exhibition, MODERATED poster session + networking Co-Chairs: <i>Miriam CORTESE-KROTT</i> (GERMANY) + <i>Annarita DI LORENZO</i> (USA)	
14:45 – 16:15	<i>LT1</i>	<i>LT2</i>
	Session 13: BHF Cardiovascular Session 	Session 14: Environmental Chemistry and Toxicology
	Co-Chairs: <i>Phil JAMES</i> (UK) + <i>Mark CRABTREE</i> (UK)	Co-Chairs: <i>Brian CRANE</i> (USA) + <i>Kyle M LANCASTER</i> (USA)
	14:45 – 15:15 <i>Ajay SHAH</i> (UK) Cell-specific effects of Nox2 on blood pressure and cardiovascular remodelling  15:15 – 15:45 <i>Philip BATH</i> (UK) High Explosive Treatment for Ultra-Acute Stroke: Hype of Hope  15:45 – 16:00 Award winner  16:00 – 16:15 Award winner	14:45 – 15:15 <i>Jerome SANTOLINI</i> (FRANCE) 15:15 – 15:45 <i>Elizabeth BOON</i> (USA) 15:45 – 16:00 <i>Kyle M LANCASTER</i> (USA) 16:00 – 16:15 TBC
16:15 – 16:35	Refreshments, exhibition + networking	
16:35 – 18:05	<i>LT1</i>	<i>LT2</i>
	Session 15: Vascular Disease	Session 16: New Methodologies
	Co-Chairs: <i>Jason ALLEN</i> (USA) + <i>Keith CHANNON</i> (UK)	Co-Chairs: <i>Andrew GOW</i> (USA) + <i>Joe BURGOYNE</i> (UK)
	16:35 – 17:05 <i>Phil CHOWIENCZYK</i> (UK)  17:05 – 17:35 <i>Jose TANUS-SANTOS</i> (BRAZIL) Antioxidant and cardiovascular protective effects of a non-antihypertensive dose of oral nitrite  17:35 – 17:50 <i>Thomas KELLER</i> (USA) Towards therapy: modeling of the alpha globin/eNOS complex  17:50 – 18:05 TBC	16:35 – 17:05 <i>Stacy WENDELL</i> (USA) Utilizing stable isotopes and high resolution mass spectrometry to investigate the metabolic effects of nitrogen oxides  17:05 – 17:35 <i>Greg THATCHER</i> (USA) 17:35 – 17:50 TBC 17:50 – 18:05 TBC
18:05	Meeting close Day Two	
19:00	Residents Dinner	<i>Keble College Dining Hall</i>
19:00	<b>NO Board meeting.</b> (NO board members only)	<i>Cherwell Boathouse</i>
23:00	Keble College bar closes	

## Wednesday 19 September

07:00 – 08:30	<b>Residents Breakfast</b>		<i>Keble College Dining Hall</i>
07:30 – 08:30	REGISTRATION		<i>Maths Institute</i>
08:30 – 09:20	<i>LT1</i>		
	Chair: <i>David WINK</i> (USA)		
	<b>PLENARY 4:</b>		
09:20 – 09:30	Transfer to parallel sessions		
09:30 – 10:45	<i>LT1</i>		<i>LT2</i>
	<b>Session 17: Cancer</b>		<b>Session 18: Microbiome</b>
	Co-Chairs: <i>Doug THOMAS</i> (USA) + <i>Tim BILLIAR</i> (USA)		Co-Chairs: <i>Nathan BRYAN</i> (USA) + <i>Larry WEISS</i> (USA)
	09:30 – 09:50 <i>Scot WALDMAN</i> (USA) 09:50 – 10:10 <i>Jenny CHANG</i> (USA) 10:10 – 10:30 <i>Dominique BONNET</i> (UK) Increased vascular permeability in the bone marrow contributes to disease progression and drug response in acute myeloid leukemia  10:30 – 10:45 TBC		09:30 – 09:50 <i>Gena TRIBBLE</i> (USA)  09:50 – 10:10 <i>Diogo SILVA</i> (UK) On the metabolic phenotype of the ammonia-oxidiser <i>Nitrosomonas eutropha</i> D23 and demonstration of its anti-biofilm activity  10:10 – 10:30 TBC  10:30 – 10:45 TBC
10:45 – 11:15	Refreshments, exhibition, posters + networking		
11:15 – 12:45	<i>LT1</i>		<i>LT2</i>
	<b>Session 19: Nitric oxide and vascular redox signaling in health and disease</b>		<b>Session 20: Exercise</b>
	Co-Chairs: <i>Giovanni MANN</i> (UK) + <i>Joao LARANJINHA</i> (PORTUGAL)		Co-Chairs: <i>Eddie WEITZBERG</i> (SWEDEN) + <i>Anni VANHATALO</i> (UK)
	11:15 – 11:45 <i>Emrah EROGLU</i> (USA) Genetic biosensors for imaging nitric oxide and implications for redox biology  11:45 – 12:15 <i>Joern STEINERT</i> (UK) Dysregulation of nitric oxide and redox signaling underlies synaptic dysfunction in neurodegeneration  12:15 – 12:30 <i>Joao LARANJINHA</i> (PORTUGAL) Role of nitric oxide in neurovascular coupling: consequences for neurodegeneration and aging  12:30 – 12:45 <i>Thomas P. KEELEY</i> (UK) Shear stress and inflammation regulated endothelial nitric oxide signaling under physiological normoxia		11:15 – 11:45 <i>Andy JONES</i> (UK) 11:45 – 12:15 TBC 12:15 – 12:30 TBC 12:30 – 12:45 TBC
12:45 – 13:15	Packed lunch, exhibition, posters + networking		
13:15	Meeting close Day Three		
13:30 – 15:30	<b>Elsevier workshop</b>		LT2
14:00 – 18:30	<b>Excursions (optional)</b> Blenheim Palace Oxford walking tour		
19:00	<b>Gala dinner pre dinner drinks</b>		<i>Keble College</i>
19:45	<b>Gala dinner</b>		<i>Keble College Dining Hall</i>
24:00	<b>Keble College bar closes</b>		

## Thursday 20 September

07:00 – 08:30	<b>Residents Breakfast</b>		<i>Keble College Dining Hall</i>
07:30 – 08:30	REGISTRATION		<i>Maths Institute</i>
08:30 – 10:00	<i>LT1</i>		
	<b>Session 21: Hot Topics</b>		
	Co-Chairs: <i>Jack LANCASTER</i> (USA) + <i>Andrew GOW</i> (USA)		
	8 x speakers TBC		
10:00 – 10:05	<b>NO 2020</b> meeting launch		
10:05 – 10:30	Refreshments, exhibition, posters + networking		
10:30 – 12:00	<i>LT1</i>		<i>LT2</i>
	<b>Session 22: H<sub>2</sub>S and Species Interaction</b>		<b>Session 23: Arginine, Arginase and the Future of Arginase Inhibition</b>
	Co-Chairs: <i>Rakesh PATEL</i> (USA) + <i>Chris KEVIL</i> (USA)		Co-Chairs: <i>Claudia MORRIS</i> (USA) + <i>Carol COLTON</i> (USA)
	10:30 – 10:45 <i>David LEFER</i> (USA) 10:45 – 11:15 <i>Wayne ORR</i> (USA) 11:15 – 11:45 <i>Jaisong BIANG</i> (SINGAPORE)  11:45 – 12:00 <i>Mike PLUTH</i> (USA) Chemical Tools for H <sub>2</sub> S Delivery	10:30 – 10:45 <i>Sidney MORRIS</i> (USA) 10:45 – 11:15 <i>John PERNOW</i> (SWEDEN) 11:15 – 11:45 <i>Carol COLTON</i> (USA) 11:45 – 12:00 TBC	
12:00 – 12:15	Comfort break		
12:15 – 13:45	<i>LT1</i>		<i>LT2</i>
	<b>Session 24: Mechanisms of Nitrate-Nitrite Reduction and Bioactivity</b>		<b>Session 25: Biochemistry / Structural Biology of sGC</b>
	Co-Chairs: <i>Marcelo MONTENEGRO</i> (SWEDEN) + <i>Alan SCHECHTER</i> (USA)		Co-Chairs: <i>Annie BEUVE</i> (USA) + <i>Peter SANDNER</i> (GERMANY)
	12:15 – 12:45 <i>Rakesh PATEL</i> (USA) 12:45 – 13:15 <i>Mattias CARLSTRÖM</i> (SWEDEN)  13:15 – 13:30 <i>Barbora PIKNOVA</i> (USA) The underappreciated role of skeletal muscle in nitrate-based nitric oxide metabolic pathways  13:30 – 13:45 TBC	12:15 – 12:45 <i>Michael MARLETTA</i> (USA) 12:45 – 13:15 <i>Dennis STUEHR</i> (USA) 13:15 – 13:30 <i>Adam STRAUB</i> (USA) 13:30 – 13:45 TBC	
13:45 – 14:00	Closing remarks		
14:00 – 14:45	Lunch		
14:45	Meeting Close		