

# CONFERENCE AGENDA

**CURIOUS2018**  
FUTURE INSIGHT CONFERENCE

**JULY 16-18 2018**  
DARMSTADT, GERMANY

[WWW.CURIOUS2018.COM](http://WWW.CURIOUS2018.COM)

# AGENDA DAY ONE

13.00

## OPENING CEREMONY Welcome Introductory Speech

Ulrich Betz (*Merck KGaA, Darmstadt, Germany*)  
David Bull (*Moderator*)  
Stefan Oschmann (*CEO Merck KGaA, Darmstadt, Germany*)

Spectrum

13.30

## Merck – how to prosper for 350 years and beyond

Frank Stangenberg-Haverkamp  
(*Chairman family board E. Merck KGaA*)

Spectrum

14.00

## Blue ocean shift- beyond competing: proven steps to inspire confidence and seize new growth

Renée Mauborgne (*INSEAD*)

Spectrum

14.45

## From Digital Life to Extending Healthy Human Life

Craig Venter (*Human Longevity, Inc.*)

Spectrum

15.30

## Networking Coffee Break & Exhibition

16.00

Joao Monteiro (Nature)

Spectrum

## Nature Roundtable The Future of Healthcare Innovation

**nature**

16.45

17.30

18.15

David Bull

Ferrum

**Foresight for visioning science, technology and innovation policy**

Shinichi Akaike  
(*NISTEP*)

**Bringing new chemistry to life**

Frances Arnold  
(*Caltech*)

**Curiosity driven research: Don't predict the future. Create it.**

Daniel Zajfman  
(*Weizmann Institute*)

Tim Appenzeller (AAAS/Science)

Titanium

**Stimuli-responsive smart soft materials fabricated under nonequibrated conditions**

Takuzo Aida  
(*RIKEN*)

**A new concept for asymmetric lewis acid catalysis**

Benjamin List  
(*Max-Planck-Institut*)

**Nanomaterials for the life sciences**


Ulrich Wiesner  
(*Cornell University*)

## Networking Dinner & Exhibition & AI Workshop

# AGENDA DAY TWO

08.45	<b>Introductory Comments</b>	David Bull	Spectrum
09.00	<b>Rapid discovery of gene function</b>	Bruce Beutler ( <i>UT Southwestern Medical Center</i> )	Spectrum
09.45	<b>Title</b>	Fraser Stoddart ( <i>Northwestern University</i> )	Spectrum
10.30	<b>Announcement Future Insight Prize</b>	Stefan Oschmann ( <i>Merck KGaA, Darmstadt, Germany</i> )	Spectrum
10.45	<b>Networking Coffee Break &amp; Exhibition</b>		
11.15	David Bull <b>Pathology from the molecular scale on up</b>	Spectrum Gary Nolan ( <i>Stanford University</i> )	Titanium
12.00	John Gyapong <b>Impacting lives through innovative delivery of global health interventions in sub-saharan Africa</b>	( <i>University of Health and Allied Sciences</i> )	
	<b>Barcamp Vibrant Digital</b>		Ferrum
	<b>Barcamp Life Reimagined/ Synthetic Biology</b>		Joao Monteiro ( <i>Nature</i> )
12.45	<b>Networking Lunch &amp; Exhibition &amp; AI Workshop</b>		

# AGENDA DAY TWO

13.45	<b>Introductory Comments</b>	David Bull	Spectrum												
14.00	<b>Perspectives in chemistry – from supramolecular chemistry to adaptive chemistry</b>	Jean-Marie Lehn ( <i>University of Strasbourg</i> )	Spectrum												
14.45	<b>Cryo-electron microscopy, and the transformation of structural biology</b>	Joachim Frank ( <i>Columbia University</i> )	Spectrum												
15.30	<b>Networking Coffee Break &amp; Exhibition</b>														
16.00	<b>Science Roundtable</b> <b>Technology Breakthrough of the year</b> 	Tim Appenzeller (AAAS/Science)	Spectrum												
16.45		David Bull	Ferrum												
17.30		Joao Monteiro (Nature)	Titanium												
18.15	<table border="1"> <tr> <td><b>The neglected diseases: Will a „new world order“ reverse global gains?</b></td><td>Peter Hotez (<i>Baylor College</i>)</td><td><b>Liquid Sunlight</b></td><td>Peidong Yang (<i>University of California</i>)</td></tr> <tr> <td><b>Man, Microbes and Systems Medicine</b></td><td>Jeremy Nicholson (<i>Imperial College London</i>)</td><td><b>Biological variability and experimental biology: Threats and opportunities</b></td><td>Ruedi Aebersold (<i>ETH Zurich</i>)</td></tr> <tr> <td><b>Title</b></td><td>Makoto Fujita (<i>University Tokyo</i>)</td><td><b>Genome writing</b></td><td>Jef Boeke (<i>NYU Langone Health</i>)</td></tr> </table>			<b>The neglected diseases: Will a „new world order“ reverse global gains?</b>	Peter Hotez ( <i>Baylor College</i> )	<b>Liquid Sunlight</b>	Peidong Yang ( <i>University of California</i> )	<b>Man, Microbes and Systems Medicine</b>	Jeremy Nicholson ( <i>Imperial College London</i> )	<b>Biological variability and experimental biology: Threats and opportunities</b>	Ruedi Aebersold ( <i>ETH Zurich</i> )	<b>Title</b>	Makoto Fujita ( <i>University Tokyo</i> )	<b>Genome writing</b>	Jef Boeke ( <i>NYU Langone Health</i> )
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19.00	<b>Panel Discussion – Future Insight Prize</b>														
	<b>Networking Dinner &amp; Exhibition &amp; AI Workshop</b>														

# AGENDA DAY THREE

08.45	Introductory Comments	David Bull	Spectrum			
08.50	Curious2018 Future Insight - innovation message	Satya Nadella (CEO Microsoft)	Spectrum			
09.00	What is happening to chemistry?	George Whitesides (Harvard University)	Spectrum			
09.45	Taking synthetic biology out of the lab and into your life	Justin Sanchez (BTO, DARPA)	Spectrum			
10.30	Networking Coffee Break & Exhibition					
11.45 11.00	David Bull	Spectrum	Tim Appenzeller (AAAS/Science)	Ferrum	Joao Monteiro (Nature)	Titanium
	Cognitive computing for discovery	Scott Spangler (IBM Watson)		New chemical reactions energized by light		Dave MacMillan (Princeton University)
	Cybernetics Revolution: Fusion of humans, robots and information systems	Yoshiyuki Sankai (Cyberdyne, INC.)	Assembly line synthesis creating molecules with tailored shape	Varinder Aggarwal (Bristol University)	Barcamp Healthy Lives	
12.30	Networking Lunch & Exhibition					

# AGENDA DAY THREE

13.15	<b>Introductory Comments</b>		David Bull	Spectrum
13.30	<b>The transformative CRISPR-Cas9 technology: Origins and applications</b>		Emmanuelle Charpentier ( <i>Max-Planck-Institute</i> )	Spectrum
14.15	David Bull	Spectrum	Tim Appenzeller (AAAS/Science)	Ferrum
	Joao Monteiro (Nature)	Titanium	<b>Barcamp Materials and Solutions</b>	
15.00	<b>Genomics + clinical science + computer science = early detection</b> Kenneth Drazan ( <i>GRAIL, INC.</i> )		<b>From diagnosing diseases to predicting diseases</b> Rudi Balling ( <i>University of Luxembourg</i> )	
15.45	<b>Networking Coffee Break &amp; Exhibition</b>			
16.15	David Bull	Spectrum	Tim Appenzeller	Ferrum
	Joao Monteiro (Nature)	Titanium	<b>Barcamp Materials and Solutions</b>	
17.00	<b>Giving new life to materials for energy, the environment and medicine</b> Angela Belcher ( <i>MIT</i> )		<b>Building scale &amp; breadth at the Ginkgo Bioworks Foundry</b> Tom Knight ( <i>Ginkgo Bioworks</i> )	
17.45	<b>Closing comments and outlook</b>		Ulrich Betz ( <i>Merck KGaA, Darmstadt, Germany</i> )	Spectrum
17.00	<b>Role of infectious agents in human colon cancer</b>		Harald zur Hausen ( <i>Heidelberg Cancer Research Center</i> )	Spectrum



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