



**Northumbria
University**
NEWCASTLE



**Newcastle
University**

BBE2021

Biotechnology for the Built Environment

Four day online summit organised by the HBBE

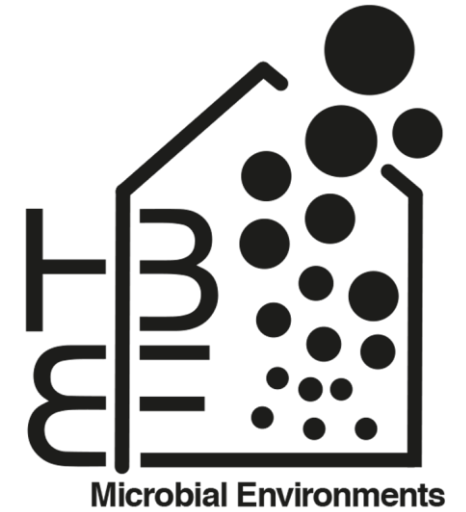


Research
England

 **Hub for Biotechnology
in the Built Environment**

Tuesday 6th July 2021

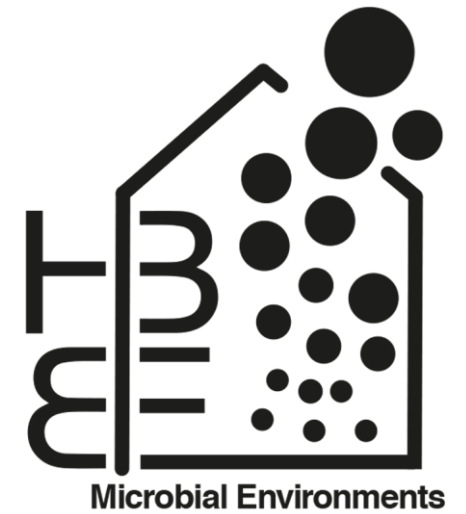
Time (GMT)	Speaker / Session
11:00 – 11:15	Summit Opening from Prof. Martyn Dade-Robertson & Prof. Gary Black
11:15 – 11:30	Welcome from Prof. Darren Smith HBBE Microbial Environments Research Theme Lead
11:30 – 12:30	Speaker: Prof. Jack Gilbert University of California San Diego (USA) Presentation Title: The microbiome of the built environment
12:30 – 13:15	Lunch / HBBE Research Poster Session
13:15 – 14:15	Speaker: Richard Beckett Bartlett School of Architecture, University College London (UK) Presentation Title: Probiotic cities
14:15 – 14:30	Comfort Break
14:30 – 15:30	Speaker: Prof. Erica Hartmann Northwestern University (USA) Presentation Title: Environmental factors that influence antimicrobial resistance in the indoor microbiome
15:30 – 15:45	Comfort Break
15:45 – 17:15	Presentations from HBBE Research Fellows & Associated Academics Details on next page/slide



BBE
BIOTECHNOLOGY
FOR THE BUILT
ENVIRONMENT
2021

Presentations from HBBE Fellows & Associated Academics (Tuesday 6th July 2021)

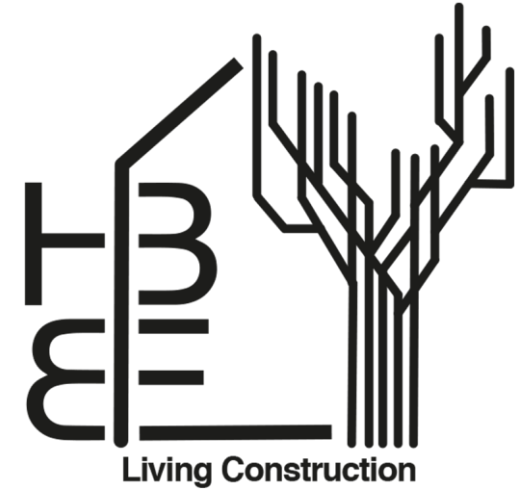
Time (GMT)	Presentation Order
15:45 – 16:05	Dr Angie Sherry Presentation Title: TBC
16:05 – 16:25	Dr Matt Bashton Presentation Title: TBC
16:25 – 16:45	Dr Matt Unthank Associate Professor and Senior Lecturer in Polymer Chemistry at Northumbria University Presentation Title: TBC
16:45 – 17:05	Prof. David Pearce Professor of Microbiology at Northumbria University Presentation Title: TBC
17:05 – 17:15	Short Q & A



BBE
BIOTECHNOLOGY
FOR THE BUILT
ENVIRONMENT
2021

Wednesday 7th July 2021

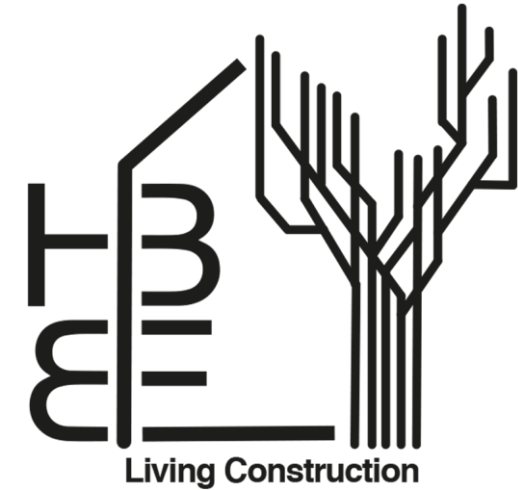
Time (GMT)	Speaker / Session
11:15 – 11:30	Welcome from Prof. Martyn Dade-Robertson HBBE Living Construction Research Theme Lead
11:30 – 12:15	Living Construction Research Group Projects Update Dr Meng Zhang & Prof. Martyn Dade-Robertson
12:15 – 13:15	Speaker: Dr Bastian Beyer Humboldt University Berlin (Germany) Presentation Title: TBC
13:15 – 14:00	Lunch / HBBE Research Poster Session
14:00 – 15:00	Speaker: Prof. Jenny Sabin Cornell University (USA) Presentation Title: TBC
15:00 – 15:15	Comfort Break
15:15 – 16:15	Speaker: Dr Peter Nguyen Wyss Institute, Harvard University (USA) Presentation Title: TBC
16:15 – 16:30	Comfort Break
16:30 – 17.15	Presentations from HBBE Research Fellows & Associated Academics Details on next page/slide



BBE
BIOTECHNOLOGY
FOR THE BUILT
ENVIRONMENT
2021

Presentations from HBBE Fellows & Associated Academics (Wednesday 7th July 2021)

Time (GMT)	HBBE Research Fellow Presentations
16:30 – 16:45	Dr Jane Scott Presentation Title: The Living Textile Interface
16:45 – 17:00	Dr Yunhong Jiang Presentation Title: Fabrication of Functional Bio-based Materials for Thermal Insulation and Built Environment
17:00 – 17:15	Dr Magda Presentation Title: Biological self-healing for sustainable building and smart heritage conservation



BBE
BIOTECHNOLOGY
FOR THE BUILT
ENVIRONMENT
2021

Thursday 8th July 2021

Time (GMT)	Speaker / Session
11:15 – 11:30	Welcome from Prof. Gary Black HBBE Building Metabolism Research Theme Lead
11:30 – 12:30	Speaker: Prof. John McGeehan Centre for Enzyme Innovation, University of Portsmouth (UK) Presentation Title: Discovery and engineering of enzymes to break down natural and synthetic polymers
12:30 – 13:15	Lunch / HBBE Research Poster Session
13:15 – 14:15	Speaker: Dr Barbara Imhof LIQUIFER (Austria & Germany) Presentation Title: TBC
14:15 – 14:30	Comfort Break
14:30 – 15:30	Speaker: Dr Liz Fletcher Industrial Biotechnology Innovation Centre (UK) Presentation Title: Wealth from Waste: Growing a sustainable future with biotechnology
15:30 – 15:45	Comfort Break
15:45 – 17:15	Presentations from HBBE Research Fellows & Associated Academics Details on next page/slide



BBE
BIOTECHNOLOGY
FOR THE BUILT
ENVIRONMENT
2021

Presentations from HBBE Fellows & Associated Academics (Thursday 8th July 2021)

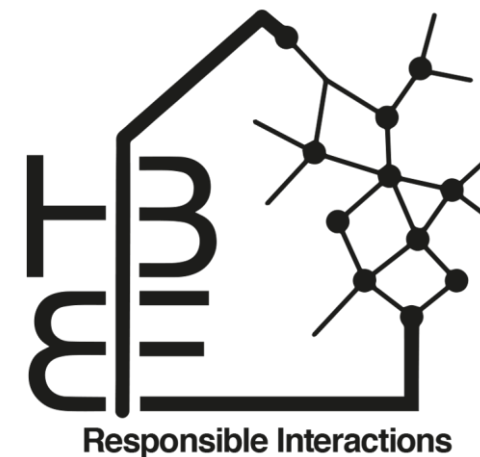
Time (GMT)	HBBE Research Fellow Presentations
15:45 – 15:55	Dr Rajesh Bommareddy Presentation Title: Sustainable production of fuels and chemicals from waste carbon
15:55 – 16:05	Dr Shafeer Kalathil Presentation Title: Microbial conversion of sunlight and carbon dioxide into high-value chemicals
16:05 – 16:15	Dr Warispreet Singh Presentation Title: Rational engineering of enzymes for improved activity and selectivity using computational approaches
16:15 – 16:25	Dr Paul James Presentation Title: Development of Synthetic Biology Toolkits for non-model organisms
16:25 – 16:35	Dr Marin Sawa Presentation Title: Biodesign: Designing with Microbes to Devising Applications
16:35 – 16:45	Dr John Allan Presentation Title: Developing new microbial chassis and new enzymatic technologies for municipal solid waste valorisation
16:45 – 17:15	Short Q & A



BBE
BIOTECHNOLOGY
FOR THE BUILT
ENVIRONMENT
2021

Friday 9th July 2021

Time (GMT)	Speaker / Session
11:15 – 11:30	Welcome from Prof. Ruth Morrow & Dr Ben Bridgens HBBE Responsible Interactions Research Theme Leads
11:30 – 12:15	The OME and HBBE Prototype Research Update Prof. Ruth Morrow & Dr Ben Bridgens
12:15 – 13:15	Speaker: Prof. Peg Rawes Bartlett School of Architecture, University College London (UK) Presentation Title: TBC
13:15 – 14:00	Lunch / HBBE Research Poster Session
14:00 – 15:00	Speaker: Prof. David Benjamin Columbia University (USA) Presentation Title: TBC
15:00 – 15:15	Comfort Break
15:15 – 16:15	Panel Discussion: Putting Biotechnologies into Practice in the Built Environment: Challenges and Opportunities Panellists: <ul style="list-style-type: none">• Prof. Cristina Nan: Eindhoven University of Technology (Netherlands)• Adam West: CZWG Architects (UK)• Adam Davies: Tÿ Syml Design Studio (UK)
16:15 – 16:30	HBBE Closing Comments



BBE
BIOTECHNOLOGY
FOR THE BUILT
ENVIRONMENT
2021