

PRESS RELEASE

Brian Luke receives Walther Flemming Award

18 March 2015, Mainz, Germany. Brian Luke, Group Leader at the Institute of Molecular Biology (IMB) in Mainz, has been awarded the German Society for Cell Biology's Walther Flemming Award. The Award is given to outstanding young researchers for scientific merit in cell biology. It is sponsored by the European Journal of Cell Biology and is accompanied by prize money of EUR 2,000.

The Walther Flemming Award is named after one of the pioneers of cell biological research. His investigations in the late 19th century led him to discover chromatin and describe in detail the process of cell division, which he named mitosis. Over a century later, we know much more about these processes but there are still many unanswered questions. Brian Luke's innovative work addresses some of these questions, especially with regard to understanding why cells sometimes enter mitosis even though chromosomes are damaged. He is using cutting-edge techniques to study telomere biology in the context of normal cell growth, ageing and cancer.



Telomeres are caps found at the ends of linear chromosomes. Although the ends of linear strands of DNA are usually recognised by the cell as being broken and trigger a DNA damage response, at the ends of chromosomes, telomeres protect the DNA from this response. They are thought to be central in the ageing process because problems with telomere function, which increase with age, can lead to cell death.



Brian Luke's lab explores several aspects of telomere structure and function that will provide valuable insights into both ageing and cancerous cells, where telomere maintenance is required for continued tumour growth. First, they are investigating the role of a recently discovered non-coding telomere repeat containing RNA (TERRA), which is transcribed from telomeres and is important for telomere function. Second, they study looping of DNA at telomeres, which plays a role in protecting chromosome ends from degradation. Finally, the Luke lab is interested in understanding why some cells continue to grow when telomeres get damaged while others arrest growth and become senescent.

Brian Luke completed his PhD in Biochemistry at ETH Zurich in 2005 and went on to a postdoc at the École Polytechnique Fédérale de Lausanne (EPFL), where he played a crucial role in the discovery of the non-coding RNA TERRA, which remains one of his main research foci. He established his first independent research group at the Centre for Molecular Biology at the University of Heidelberg (ZMBH), during which time he was elected as an EMBO Young Investigator and received a Chica and Heinz Schaller Award. Luke moved with his group to IMB in 2015.

Further details

Further information about research in the Luke group can be found at www.imb.de/luke.

About the Institute of Molecular Biology gGmbH

The Institute of Molecular Biology gGmbH (IMB) is a centre of excellence in the life sciences that was established in 2011 on the campus of Johannes Gutenberg University Mainz (JGU). Research at IMB concentrates on three cutting-edge areas: epigenetics, developmental biology, and genome stability. The institute is a prime example of a successful collaboration between public authorities and a private foundation. The Boehringer Ingelheim Foundation has dedicated 100 million euros for a period of 10 years to cover the operating costs for research at IMB, while the state of Rhineland-Palatinate provided approximately 50 million euros for the construction of a state-of-the-art building. For more information about IMB, please visit: www.imb.de.

About the Boehringer Ingelheim Foundation

The Boehringer Ingelheim Foundation is an independent, non-profit organisation committed to the promotion of the medical, biological, chemical and pharmaceutical sciences. It was established in 1977 by Hubertus Liebrecht (1931-1991), a member of the shareholder family of the company Boehringer Ingelheim. With the PLUS 3 Perspectives Programme and the Exploration Grants, the foundation supports independent group leaders. It also endows the internationally renowned Heinrich Wieland Prize as well as awards for up-and-coming scientists. In addition, the foundation pledged to donate 100 million euros to finance the scientific running of the IMB at Johannes Gutenberg University Mainz for ten years. In 2013, the Boehringer Ingelheim Foundation donated a further 50 million euros to Johannes Gutenberg University Mainz. www.boehringer-ingelheim-stiftung.de.

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