BLUMENBACH LECTURE

LECTURE SERIES OF THE
JOHANN-FRIEDRICH-BLUMENBACH-INSTITUTE
FOR ZOOLOGY AND ANTROPOLOGY

THE EVOLUTION OF ARTHROPOD DIVERSITY: INSIGHTS FROM CRUSTACEAN LIMBS AND BUTTERFLY WINGS

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UNIVERSITY OF CALIFORNIA, BERKELEY, USA

I will present two studies in which emerging model systems have been used to gain insight into the mechanisms of development, and how development evolves to create novel body plans and coloration.
In the first example, I will describe our comprehensive analysis of Hox gene expression in the amphipod crustacean, *Parhyale hawaiensis*, and more importantly, our results from using CRISPR/Cas9 gene editing to functionally address the role of Hox genes in crustacean development. I will then describe how this experimental data leads to some new views on the evolution of the arthropod body plan.
In the second part I will discuss our work on the developmental basis for structural coloration and transparency in butterflies. While both structural color and transparency have been analyzed in great detail by optical physicists, we are now making headway in uncovering the genetic and cell biological basis for these phenomena.

Thursday,
March 30th 2017
17:00

SEMINAR ROOM
ERNST-CASPARI-HAUS (GZMB)
JUSTUS-VON-LIEBIG-WEG 11

HOST
DPTM. OF DEVELOPMENTAL BIOLOGY

GEORG-AUGUST-UNIVERSITÄT
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