



**SFB 1315**

Mechanisms and Disturbances in Memory Consolidation:  
From synapses to systems

Tuesday

**JUNE 9, 2020**  
**4:00 pm CET**

**ZOOM ID: 7754910236**

**Register at:**

**SFB1315.ifb@hu-berlin.de**

**SFB 1315 LECTURE SERIES 2019-2020**

# **EXPERIENCE- DEPENDENT PLASTICITY IN THE BRAINSTEM + CAREER TALK**

**CATHERINE CARR**

Distinguished Professor  
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College Park, MD



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German Research Foundation



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## **EXPERIENCE-DEPENDENT PLASTICITY IN THE BRAINSTEM**

**Detection of interaural time differences (ITDs) depends on precise coding of delay. In the barn owl, ITD circuit development coincides with the attainment of adult head size.**

To determine if there were effects of experience, we raised young owls with unilateral ear-plugs. In the adult birds, the preferred ITD is mapped in an orderly fashion. We hypothesized that, if the ITD circuit adjusts for the temporally altered input, the maps of ITD would be altered compared to normal.

**Recordings in birds raised to adulthood revealed shifts in the map of ITD, on the side ipsilateral to the ear plug. Ear plugging had to occur prior to the onset of hearing for these experience dependent effects to occur.**

**Catherine Carr's talk will be followed by a short career talk on her career journey, her mentors, advice to young scientists and more.**



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