



# NEURO GLOBAL Seminar



## Speaker

### Prof. Marianne Bronner

Edward B. Lewis Professor of Biology  
Director of the Beckman Institute Division  
of Biology and Biological Engineering  
California Institute of Technology

## Title

**Neural crest development:  
from stem cells to making the face, heart and peripheral  
nervous system**

## Date

29 November 2022 (Tue) 12:00-13:30 (JST)

## Registration

Refer to the message from the NGP office

## Related Website

<https://www.bbe.caltech.edu/people/marianne-bronner>

- Neuro Globalプログラム生(Neuro Global Program Students)  
【脳科学セミナーシリーズEx】 / 【先進脳科学セミナーシリーズEx】 セミナー 1ポイント  
【Brain Science Seminar Series Ex】 / 【Advanced brain science seminar series Ex】 1 point
- 医学系研究科(Graduate School of Medicine)  
【医学履修課程】 国際交流セミナー (アドバンスド講義科目) 出席1回分  
【Medical Science Doctoral Course】 International Interchange Seminar (Advanced Lecture course) 1 attendance
- 生命科学研究科(Graduate School of Life Sciences)  
【単位認定セミナー】 【イノベーションセミナー (留学生対象)】 2ポイント  
【Credit-granted seminar】 【Innovation seminar (For international students)】 2 points



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## **Title**

Neural crest development: from stem cells to making the face, heart and peripheral nervous system

## **Speaker**

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## **Abstract**

As to synopsis: During embryonic development, the neural crest is a stem cell population that arises within the neural tube but then migrates from their site of origin along defined pathways to populate numerous sites and differentiates into diverse cell types. However, neural crest populations differ along the body axis with respect to migration pathways and derivatives. For example, only cranial neural crest cells give rise to cartilage and bone of the face, only cardiac neural crest cells contribute to the heart and only vagal and sacral neural crest cells contribute to the enteric nervous system. The lecture will discuss the current knowledge of neural crest development with an eye toward how this may help understanding of congenital birth defects and regenerative medicine