



# ゲノム進化研究室 (黒川研究室)

## A Formation of the Earth

How did Earth form and differentiate?

Are Earth-like planets rare?

Where did Earth's water come from?

What was the Hadean Earth environment like?

How is the deep interior connected to the surface?

What were the critical ingredients for starting life?

## B Origin of Life

What was the first life like?

What was the last common ancestor of Earth-life?

## C Evolution of the Earth-Life System

How did complex life arise?

How is the genetic code wired to the environment?

## D Bio-Planets in the Universe

What does Earth-life teach us about the search for life in the universe?



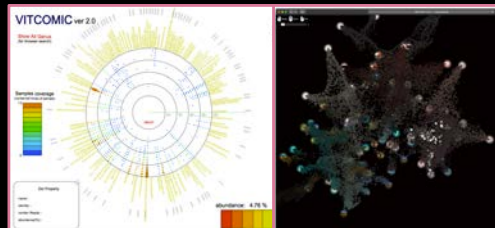
<https://www.youtube.com/c/冥王代生命学の創成>

Earth-Life Science Institute, TITECH



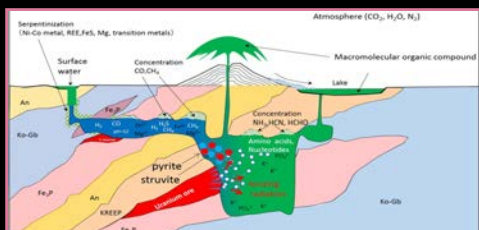
微生物ゲノム・メタゲノム  
マイクロバイオーム

Merino N et al (2020)  
Yachida S et al (2019)  
Nishiyama E et al (2018)



バイオインフォマティクス

Mori H et al (2018)  
Higashi K et al (2018a)



地球・生命の起源

Ebisuzaki T et al (2020)  
Maruyama S et al (2019)  
Higashi K et al (2018b)



統合データベース

<https://microbedb.jp/>



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誰も知らない  
面白いことを