

MOOCs1 (Massive Open Online Course 1) Report of 2016 by Professor Haruyuki Atomi (Self-paced)

Course Name: The Extremes of Life: Microbes and Their Diversity

Course Start Date: Jan 12, 2017 9:00 UTC

Course End Date: July 31, 2017 23:30 UTC

Total Enrollment: 3582

Completed Enrollment: 300

Verified Enrollment: 86 (fee'd)

Verified Completed Enrollment: 79

Enrollment from 131 Countries/Regions in Total

---Top10 Countries---

USA	815
India	254
UK	137
Canada	132
Brazil	102
Mexico	98
Japan	86
Australia	75
Germany	75
Spain	70

Age Group

< 25 41.1 %

25-40 39.6 %

41 < 19.0 %

Syllabus

Week 1: Evolution and the Diversity of Life

Evolution is a result of diversification and selection

How can we classify life?

Phylogenetic analysis

The three domains of life

Week 2: Life in Boiling Water

Extreme environments

Hyperthermophiles

More hyperthermophiles

Thermostable proteins from hyperthermophiles

Week 3: Diversity of Extremophiles

Preparing for a hot reaction

Watching a hot reaction

Extremophiles

More extremophiles

Week 4: Genome Sequences

What they tell us

How can we use them?

Using the genome to find new metabolic pathways | Part 1

Using the genome to find new metabolic pathways | Part 2

Diversity of the microbial world