

## MOOCs1 (Massive Open Online Course 1) Report of 2017 by Professor Haruyuki Atomi (Self-paced)

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

Course Start Date: Dec. 21, 2017 9:00 UTC

Course End Date: Oct. 25, 2018 23:30 UTC

Total Enrollment: 2553

Completed Enrollment: 190

Verified Enrollment: 59 (fee'd)

Verified Completed Enrollment: 51

Enrollment from 122 Countries/Regions in Total

---Top10 Countries---

USA	588
India	224
UK	107
Canada	103
France	60
Australia	59
Indonesia	54
Brazil	49
Mexico	48
China	45

Age Group

< 25 30.5 %

25-40 45.5 %

41 < 24.0 %

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