Program ForBio-TMU course
DNA Metabarcoding: Data processing and interpretation (Bio-3025/8025, UiT)

Monday, Feb. 03 – Saturday, Feb. 08, 2020, Tromsø University Museum – Museum Salen – 1st floor. Lars Thørings veg 10, 9006 Tromsø

(i) Teachers and guest lecturers:
Eric Coissac, LECA, Grenoble eric.coissac@metabarcoding.org
Tristan Cumer, Dept. Ecology & Evolution, UNIL tristan.cumer@unil.ch
Inger Alsos, Tromsø University Museum, UiT inger.g.alsos@uit.no
Sandra Garcés Pastor, Tromsø University Museum, UiT sandra.garces-pastor@uit.no
Anthony Chariton, Dept. Biological Sc., Macquarie University, Sydney
anthony.chariton@mq.edu.au
Peter Heintzman, Tromsø University Museum, UiT peter.d.heintzman@uit.no
Pierre Taberlet, LECA, Grenoble pierre.taberlet@univ-grenoble-alpes.fr
Nigel Yoccoz, UiT nigel.yoccoz@uit.no

(ii) Help during the Obitools Practicals:
Anthony Chariton, Dept. Biological Sc., Macquarie University, Sydney
anthony.chariton@mq.edu.au

(iii) Course Organization
Lasse Topstad, Tromsø University Museum, UiT, lasse.topstad@uit.no
Galina Gusarova, Tromsø University Museum, UiT, galina.gusarova@uit.no

Monday, 03 February

8.45 Coffee/tea

9-10.30:
Welcome and Individual Presentations – all participants.
10.30-11: Coffee/tea
11-13:  
Practical session 1: UNIX operating system and main commands - Eric Coissac & Tristan Cumer

13-14: Lunch break

14-15.30:  
Practical session 2: basic applications of R/R-studio - Eric Coissac & Tristan Cumer

15.30-16.00: Coffee/tea

16-18:  
Lecture 1: Selection of DNA Metabarcoding markers & primer design. EcoPrimers & EcoPCR demonstration tutorial – Eric Coissac

Tuesday, 04 February

8.45 Coffee/tea

9-10:  
Lecture 2: Raw sequence analysis (OBITools) - Eric Coissac

10 -10.30 Coffee/tea

10.30 -11.30: Guest lecture  
Lecture 3: Metabarcoding of vascular plants from soil and sediments - Inger Alsos

12-13.30 Lunch break

13.30-15  
Practical session 4: OBITools (part 1) - Tristan Cumer

15-15.30 Coffee/tea

15.30-17.30:  
Practical session 4: OBITools (part 1, continued) - Tristan Cumer

Wednesday, 05 February

8.45 Coffee/tea
9-10: Guest lecture  
Lecture 4: Ancient animal DNA in the environment - *Pete Heintzman*

10 -10.30 Coffee/tea

10.30 -12  
Practical session 5: OBITools (part 2) - *Tristan Cumer*

12-13.30 Lunch break

13:30-14:30: Guest lecture  
Lecture 5: “More on technical aspects of DNA Metabarcoding” – *Pierre Taberlet*

15.30-15.00 Coffee/tea

15.30-17.30:  
Practical session 5: OBITools (part 2, continued) - *Tristan Cumer*

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**Thursday, 06 February**

8.45 Coffee/tea

9-10:  
Lecture 6: QA/QC in Metabarcoding and its impact on reproducibility - *Anthony Chariton*

10 -10.30 Coffee/tea

10.30-11.30 Guest lecture  
Lecture 7: DNA Metabarcoding: methods for estimating false positive and negative rates - *Nigel Yoccoz*

11:30-13:00 Lunch break

13:00-14.00 Guest lecture:  
Lecture 8: by *Sandra Garcés Pastor* – *title to be announced*

14:00-15.00:  
Practical session 6: OBITools (part 3) - Eric Coissac, & Tristan Cumer

15-15.30 Coffee/tea
Friday, 07 February

8.45 Coffee/tea

9-10: Guest lecture
Lecture 9: “DNA Metabarcoding is not magic” - Pierre Taberlet

10 -10.30 Coffee/tea

10.30 –11.30
Lecture 10: DNA Metabarcoding and Biodiversity indices - Eric Coissac

11.30-12.30: Practical session 7: Biodiversity indices and Multivariate ordination in R - Eric Coissac

13-14.30 Lunch break

14-15:
Discussion/ additional lecture slot/Obitools session - available

15-15.30 Coffee/tea

Saturday, 08 February

10-11, Coffee/tea 9.45
Introduction to environmental DNA dataset(s) for practical session 8 - Eric Coissac & Tristan Cumer

11.30 -13.00:
Practical session 8: Project work - Eric Coissac & Tristan Cumer

13-14 Lunch break (we order pizza)

14-15:00:
Practical session 8 (continued): Project work - Eric Coissac & Tristan Cumer
## Participants

<table>
<thead>
<tr>
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### Free attendance

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