About the course

Overview

How spatial data on properties of terrestrial and marine environments can be combined with genomic data to gain an understanding of population structure, dispersal routes and patterns. And how such can facilitate appropriate and sustainable land and seabottom use and management.

Teachers

Cynthia Riginos (University of Queensland, guest professor at University of Gothenburg)

Anna Runemark (Lund University)

Mark Ravinet (University of Nottingham)

Kerstin Johannesson (University of Gothenburg, main organiser)

Per Jonsson (University of Gothenburg)

Dates

29th October to 4 November, 2023

Venue

Tjärnö Marine Laboratory, Strömstad, Sweden

Credits

2.5 hp

Course Schedule

Saturday 28th October

Arrivals and light evening meal

Sunday 29th October

| 08.00-09.00 | Breakfast |
|-------------|-------------------------------------|
| 09.00-10.00 | Basic population genetics (Kerstin) |
| 10.00-10.30 | Coffee/Tea |
| 10.30-12.00 | Basic R (Cynthia) |
| 12.00-13.00 | Lunch |
| 13.00-15.00 | Basic bash (Anna) |
| 15.00-15.30 | Coffee/Tea |
| 15.30-16.30 | Walk and talk |
| 17.00-18.00 | Dinner |
| 18.00-20.00 | Free time, catch up on readings |

Monday 30th October

(meals and breaks same as Sunday)

| 09.00-12.00 | Land/river/seascape genetics (Cynthia) |
|-------------|--|
| 12.00-14.00 | Lunch + Tour de Lab |
| 14.00-17.00 | Making maps and using spatial data (Cynthia) |
| 17.00-18.00 | Dinner |
| 18.00-20.00 | Short project presentations by participants |

Tuesday 31th October

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(meals and breaks same as Sunday)

09.00-12.00 Describing genetic differentiation and genetic structuring (Anna, Mark)

12.00-14.00 Lunch + visit snail beach

14.00-17.00 RDA as a flexible tool (Cynthia)

17.00-18.00 Dinner

18.00-20.00 Short project presentations by participants
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Wednesday 1st November

09.00-12.00 Simulations & demographic analyses (Mark, Zachary, Simon) 12.00-12.45 Lunch

15.00-17.00 Simulations & demographic analyses, continued

Boat excursion (ROV)

17.00-18.00 Dinner

12.45-15.00

18.00-19.00 Evening lecture (remote) - Landscape Resistance (Bill Peterman)

19.00-23.00 Inhouse pub

Thursday 2nd November

(meals and breaks same schedule as Sunday)

(meals and breaks same schedule as Sunday)

09.00-12.00 Resistance surfaces (Joscha Beninde, Isolde van Riemsdijk)

12.00-13.00 Lunch

13.00-14.30 Projecting into the future with generalised dissimilarity modelling, gradient forests (Cynthia)

14.30-17.00 Biophysical models of dispersal (Per Jonsson)

17.00-18.00 Dinner

18.00-19.00 Inspiring talks: Connectivity in the seascape - Marlene Jahnke

19.00-23.00 Inhouse pub

Friday 3rd November

(meals and breaks same schedule as Sunday)

09.00-12.00 More GEAs and genomic offsets (Cynthia)

12.00-14.00 Lunch + walk & talk

14.00-17.00 (Time permiting) Landscape genomics and genetic architectures

17.00-18.00 Dinner

19.00-23.00 Inhouse pub

Saturday 4th November

Departures in the morning -sorry to see you go!