Application for hosting the 15th EAS Basic Course on Aerobiology on July 5-9th 2021 in Brussels, Belgium

September 2020

Ir Dr Nicolas BRUFFAERTS
Mycology & Aerobiology service
Sciensano
Rue Juliette Wytsman 14 | 1050 Bruxelles | Belgium
T +32 2 642 50 42 | nicolas.bruffaerts@sciensano.be

sciensano

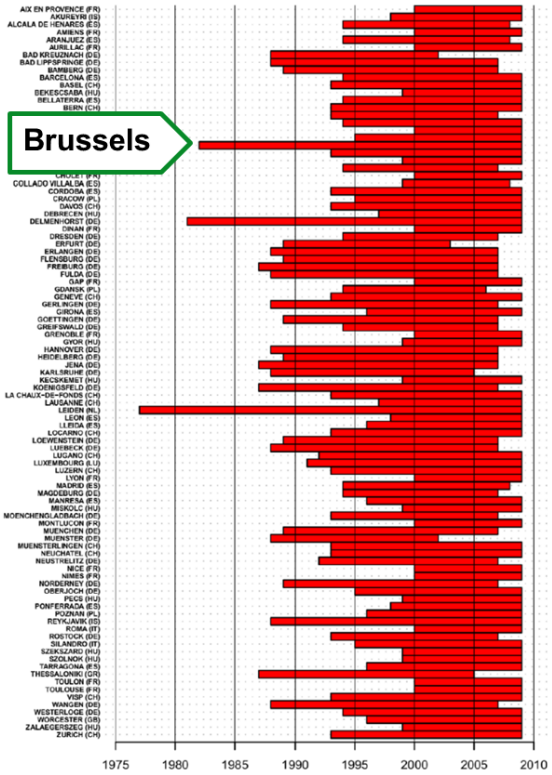
ULB UNIVERSITÉ LIBRE DE BRUXELLES

JARDIN BOTANIQUE JEAN MASSART

Host description

sciensano

- Nation-wide One-Health/Eco-Health research institute
- The *Mycology & Aerobiology* unit manages the **Belgian aerobiological surveillance network** (www.airallergy.be)
- 5 monitoring stations in the country, among which the Brussels station is one of the oldest operational stations in Europe (since 1982).



Ziello et al., *PLoS ONE* 2012

Host description

sciensano

- The *Mycology & Aerobiology* unit also manages the **Belgian fungal culture collection** (http://bccm.belspo.be/about-us/bccm-ihem)

15’000 fungal strains of biomedical interest

Host description

ULB UNIVERSITÉ LIBRE DE BRUXELLES

JARDIN BOTANIQUE JEAN MASSART

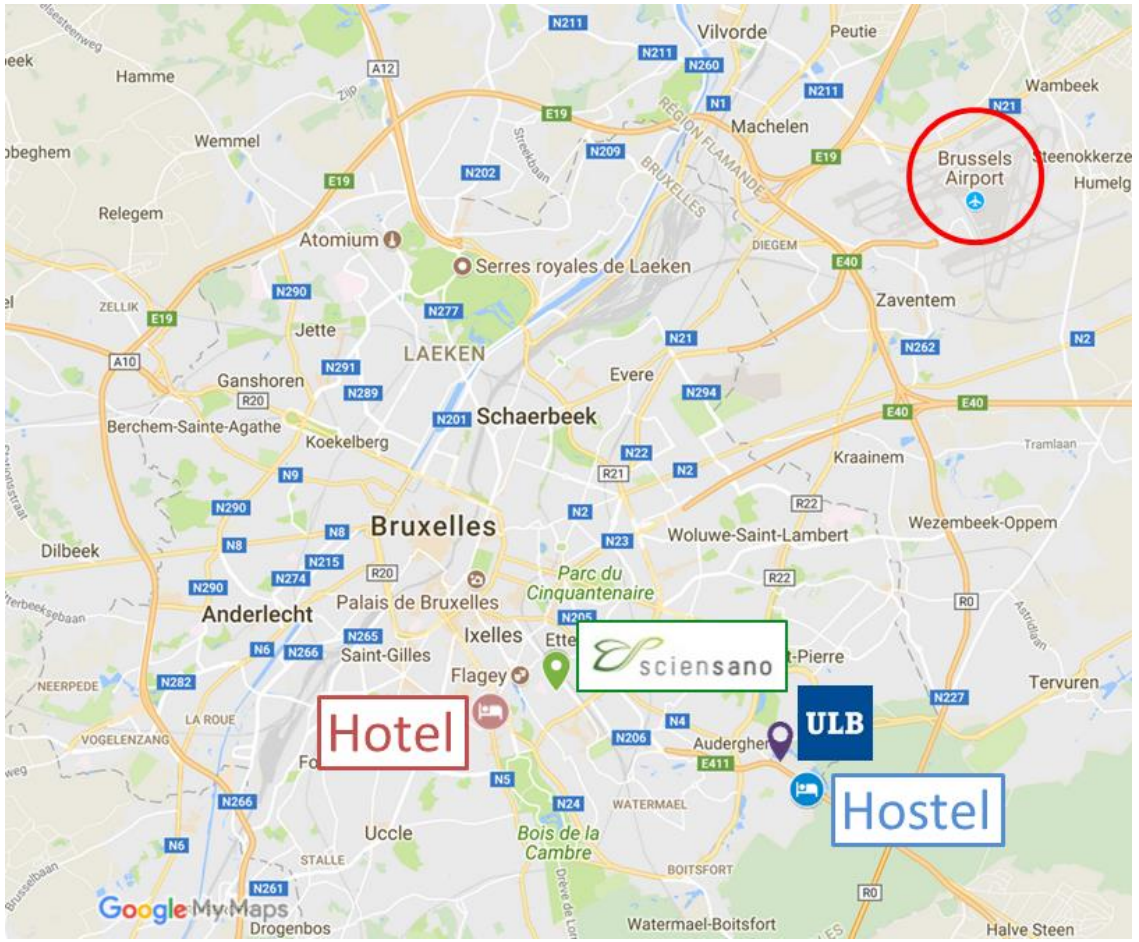
- Prof. Pierre Meerts, head the *Plant Ecology and Biogeochemistry* laboratory at the Free University of Brussels (ULB), is committed to co-organize the course with Sciensano

- The university makes available its teaching infrastructure within the experimental **Botanical Garden Jean Massart**

https://www.youtube.com/watch?v=Ucz2r0XDqNA

Location

- Brussels Airport <10 km
  with direct train connection
- Accommodation and course sites on the same South-East part of Brussels
- Students → Hostel
- Teachers → Hotel
- Sciensano → Monday's public seminar + plenary lectures
- ULB (Bot. Garden) → Main site for the course



Location

- For the students: Hostel → Sciensano (1/5 days) — ≤30 min by public transport
  Hostel → Botanical Garden (4/5 days) — = 5 min walking

- For the teachers: Hotel → Sciensano (1/5 days) — 5 min by car shuttle
  Hotel → Botanical Garden (4/5 days) — 15 min by car shuttle

Time-table from July 5th to 9th, 2021

Sunday	Monday 5th		Tuesday 6th		Wednesday 7th	
Arrival of the students and teachers	9:00-10:00	Registration	8:30-9:45	(PE) Demonstration of sampling methods	8:30-9:15	(L) Aerobiological networks, database, pollen reports
	10:00-10:10	Opening of the public seminar	9:45-10:45	(PE) Pollen identification Alnus, Corylus, Betula, Ostrya	9:15-10:00	(L) Meteorological aspect of pollen dispersal and modelling
	10:10-11:00	(L) Introduction to Aerobiology, Aerodynamics, Pollen sampling	10:45-11:00	**Coffee/tea break**	10:00-10:15	**Coffee/tea break**
	11:00-11:50	(L) Second lecture to be determined	11:00-12:00	(PE) Pollen identification Carpinus, Populus, Ulmus, Cupressaceae	10:15-11:15	(PE) Pollen identification Salix, Fraxinus, Olea, Brassicaceae, Ligustrum, Cyperaceae
	12:00-12:30	Visit of the *Mycology & Aerobiology* unit at Sciensano			11:15-12:00	(L) Methods of analysis by molecular biology
	12:30-13:30	**Lunch at Sciensano restaurant**	12:00-13:30	**Lunch in the garden**	12:00-13:45	**Barbecue in the garden**
	13:30-14:15	(L) Invited lecturer(s) to be determined	13:30-14:15	(L) Phenology and Aerobiology	13:45-16:15	Guided tour of the Botanical Garden Jean Massart
	14:15-14:30	**Coffee/tea break**	14:15-15:15	(PE) Pollen identification Pinus, Picea, Quercus, Fagus, Platanus, Castanea		
	14:30-15:30	(L) Pollen structure and morphology	15:15-16:30	(L) Basic statistic applied to aerobiology	16:15-19:00	Visit of Brussels city centre
	16:00	**Icebreaking Belgian beer**	16:30-16:45	**Coffee/tea break**		
			16:45-17:15	(L) EN16868: a new standard		
			17:15-18:00	(L) Quality control in aerobiology analysis		
	19:30	**Dinner**	19:30	**Dinner**	19:30	**Dinner**

Green = Sciensano Orange = Public seminar at Sciensano/ULB Blue = Botanical Garden Jean Massart (ULB)

(L) = Lecture (PE) = Practical Exercises

Time-table from July 5th to 9th, 2021

Thursday 8th		Friday 9th	
8:30-9:30	(PE) Pollen identification Juglans, Plantago, Rumex, Poaceae, Amaranthaceae, Urticaceae	8:30-9:30	(PE) Hirst spore trap: Preparation of drums and slides from air samples of the garden
9:30-10:15	(L) Seasonal and short-term forecasting	9:30-10:30	(PE) Final revisions
10:15-10:30	**Coffee/tea break**	10:30-10:45	**Coffee/tea break**
10:30-11:30	(PE) Pollen identification Iva, Asteraceae Liguliflorae, Artemisia, Ambrosia, Solidago, Xanthium	10:45-11:15	Theoretical test exam
11:30-12:15	(L) Allergy to pollen – clinical aspect	11:15-12:30	Practical test exam
12:15-13:45	**Lunch in the garden**	12:30-13:30	**Lunch in the garden**
13:45-14:30	(L) Direct sampling of aeroallergens and new methods in aerobiology	13:30-14:30	Presentation of Certificates, Comments, Conclusion
14:30-15:15	(L) Health impacts of moulds		
15:15-15:30	**Coffee/tea break**		
15:30-16:15	(L) Morphology of fungal spores		
16:15-17:45	(PE) Fungal spores identification		
19:30	**Last dinner at restaurant**		

Green = Sciensano Orange = Public seminar at Sciensano/ULB Blue = Botanical Garden Jean Massart (ULB)

(L) = Lecture (PE) = Practical Exercises

Sciensano facilities

- Site used on Monday
  - AM: Public seminar
  - PM: Course (plenary lectures)

- Auditorium available
  (≥50 seats, beamer, flipchart, WiFi)

- Restaurant for lunch meals
  (custom menus: veggie, halal, etc.)
  - On site for Monday
  - Delivered to the Botanical Garden for the rest of the week

ULB facilities at the Botanical Garden

- Site used for 4/5 days of the course

- Room for plenary lectures
  (≥30 seats, beamer, flipchart, WiFi)

ULB facilities at the Botanical Garden

- Site used for 4/5 days of the course

- Room for plenary lectures
  (≥30 seats, beamer, flipchart, WiFi)

- Room for practical exercises
  - ≥30 microscopes (Leica CME)
  - 1 Leica DMLB with camera cable-connected to beamer
  - 1 WiFi-connected portable camera to quickly project student's field of view

ULB facilities at the Botanical Garden

- Site used for 5/6 days of the course

- Room for plenary lectures
  (≥30 seats, beamer, flipchart, WiFi)

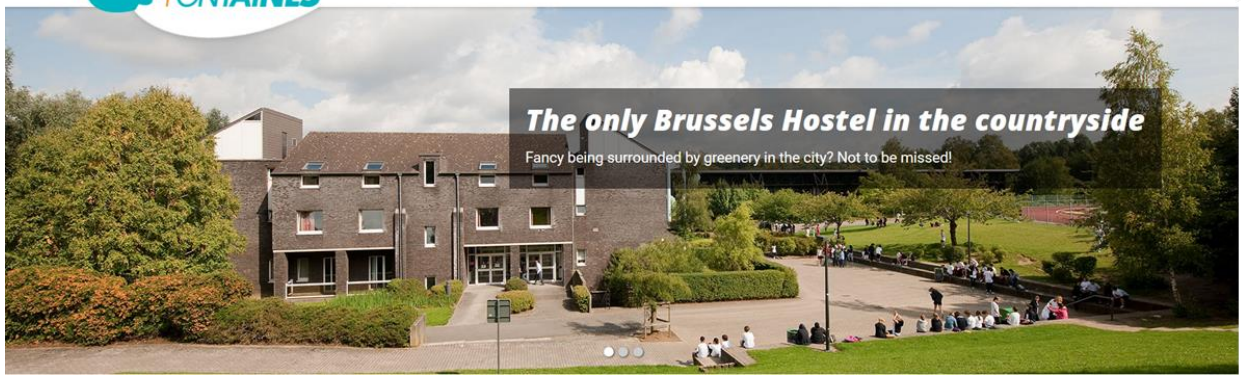
- Room for practical exercises
  - ≥30 microscopes (Leica CME)
  - 1 Leica DMLB with camera cable-connected to beamer
  - 1 WiFi-connected portable camera to quickly project student's field of view

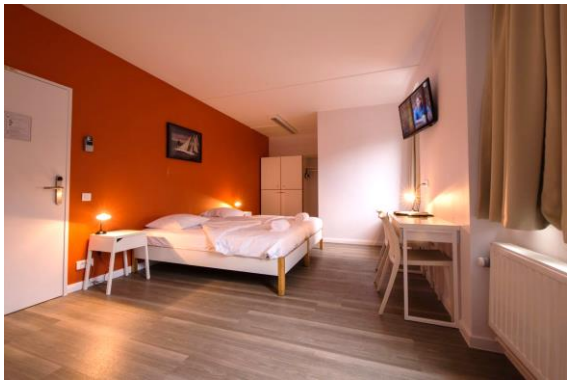
- Specific material for teaching aerobiology
  - Sampler and lab equipment for the Hirst method
  - 3D-printed pollen models
  - Reference slides collection of pollen and fungal spores
  - Pure pollen in powder

Accommodation for students

AUBERGE DES 3 FONTAINES

www.auberge3fontaines.be





- Rooms for 2 persons
- Restaurant + cafetaria with terrace
- Free WiFi
- On the edge of the Sonian Forest
- Parking spaces
- 15min from Metro <1min from bus

Accommodation for teachers

Brussels Centre Le Châtelain

Single superior rooms on garden side






Outdoor excursions

- Guided tour of the **Botanical Garden Jean Massart:** arboretum, orchard, and other thematic areas (invasive plants, metallophyte plants, medicinal plants, etc.)



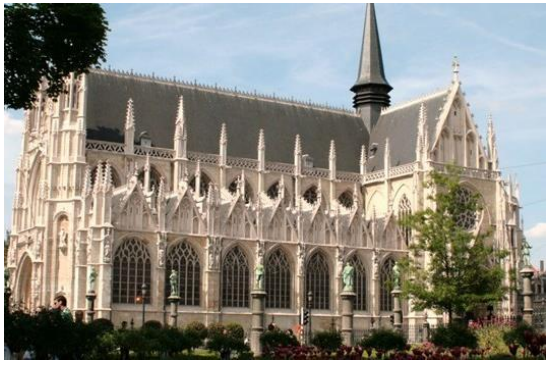









Guided tour in Brussels centre



Budget (intermediate version)

ESTIMATED TOTAL COST		
Hotel for the teachers (5 nights, breakfast included, superior room, garden side)	390€x5p.	1950€
Hostel for the students (5 nights, breakfast included)	200€x22p.	4400€
Public transport for the students (Monday at Sciensano + Excursion)	2x4.5€x25p.	225€
Daily transport of the teachers (taxi or private car)	15€x10waysx5p.	750€
Lunches from Sciensano restaurant (5 days)	5x15€x30p.	2250€
Catering for coffee/tea breaks	5x25€	125€
Last dinner	40€x30p.	1200€
Teaching material (printing, lab material, 3D printing, insurance)	1500€	1500€
Guide for the excursion in Brussels centre	150€	150€
	TOTAL	12550€

ESTIMATED TOTAL INCOME		
Participation fees for EAS members (if all complete fees incl. accommodation)	580€x11p.	6380€
Participation fees for non EAS members (if all complete fees incl. accommodation)	680€x11p.	7480€
Participation fees for 3 persons of the ULB	Offered	0€
EAS grants	TBD	TBD
IAA grants	TBD	TBD
Sponsoring	TBD	TBD
	TOTAL	13860€

TBD = To Be Determined

- Budget will be adjusted depending on the real travel/accommodation cost of the students (Belgian participants are expected).
- At least 50% of the net profits will be returned to the European Aerobiology Society.
- 3 participation fees will be freely offered at the ULB, in exchange of their active involvement in the co-organization of the course.
- Sponsoring partners will be seeked from early 2021 among several companies: Burkard Manufacturing Co Ltd, easySPT, Bertin Instruments, ParticleVision, Stallergenes Greer, etc.

Stay safe
and
see you soon!