



workshop on genomics

Český Krumlov
6-19 January, 2019

objectives

- information about settings and logistics
- workshop background and history
- establishing expectations
- miscellany

f.a.q.

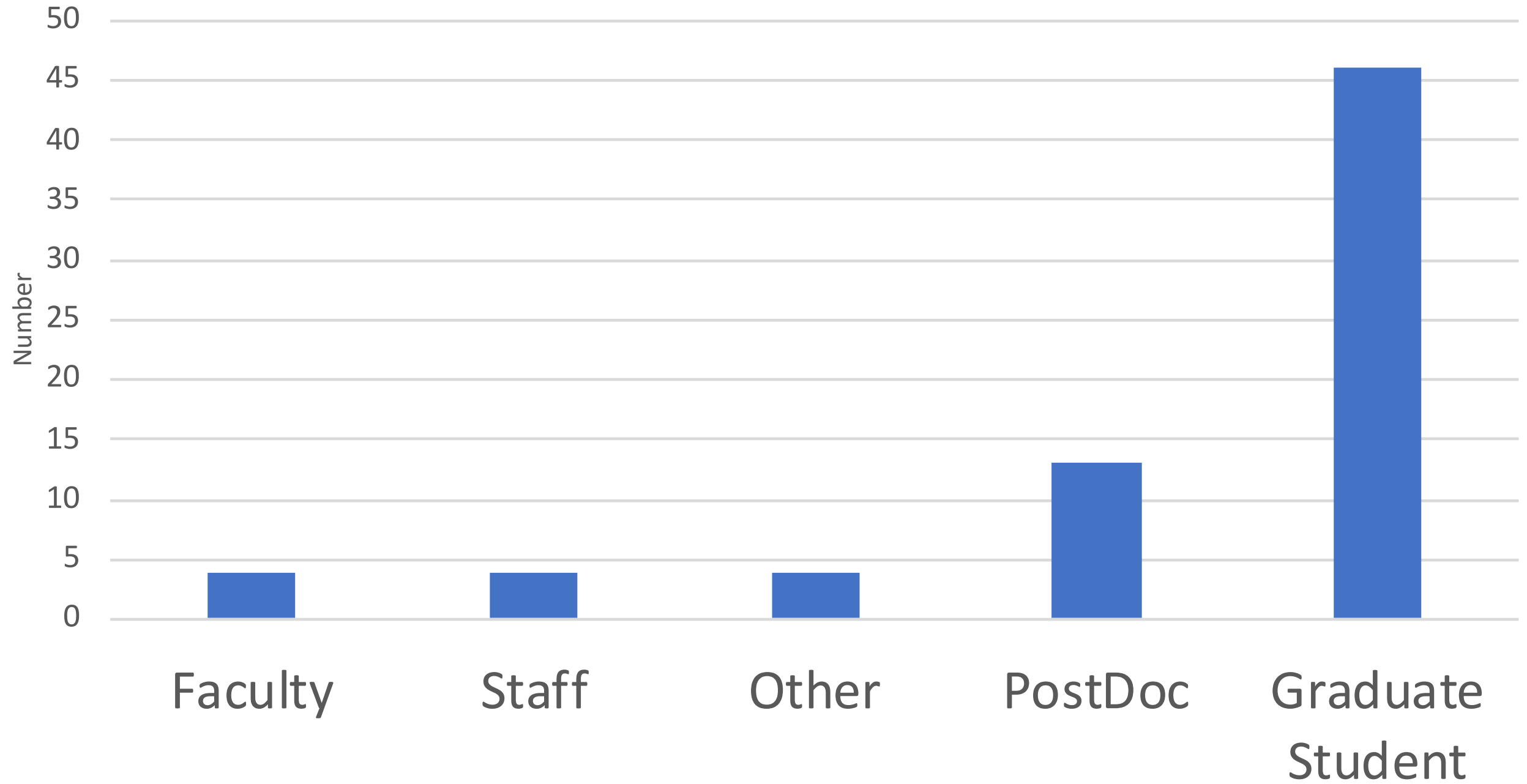
- where are the restrooms?
- coffee breaks?
 - approx. 10:00 in the Theatre Cafe
 - anytime in House of Prelate (Computer Lab)
 - functional coffee and tea only. No half-calf-decaf-double-mocha-pour-over-late's!
- where and when to eat?
 - workshop map on the main schedule page
 - information from Daniel Kintzl
 - ask the team
 - times: 12-14, 17-19
 - late night dining options are limited

who

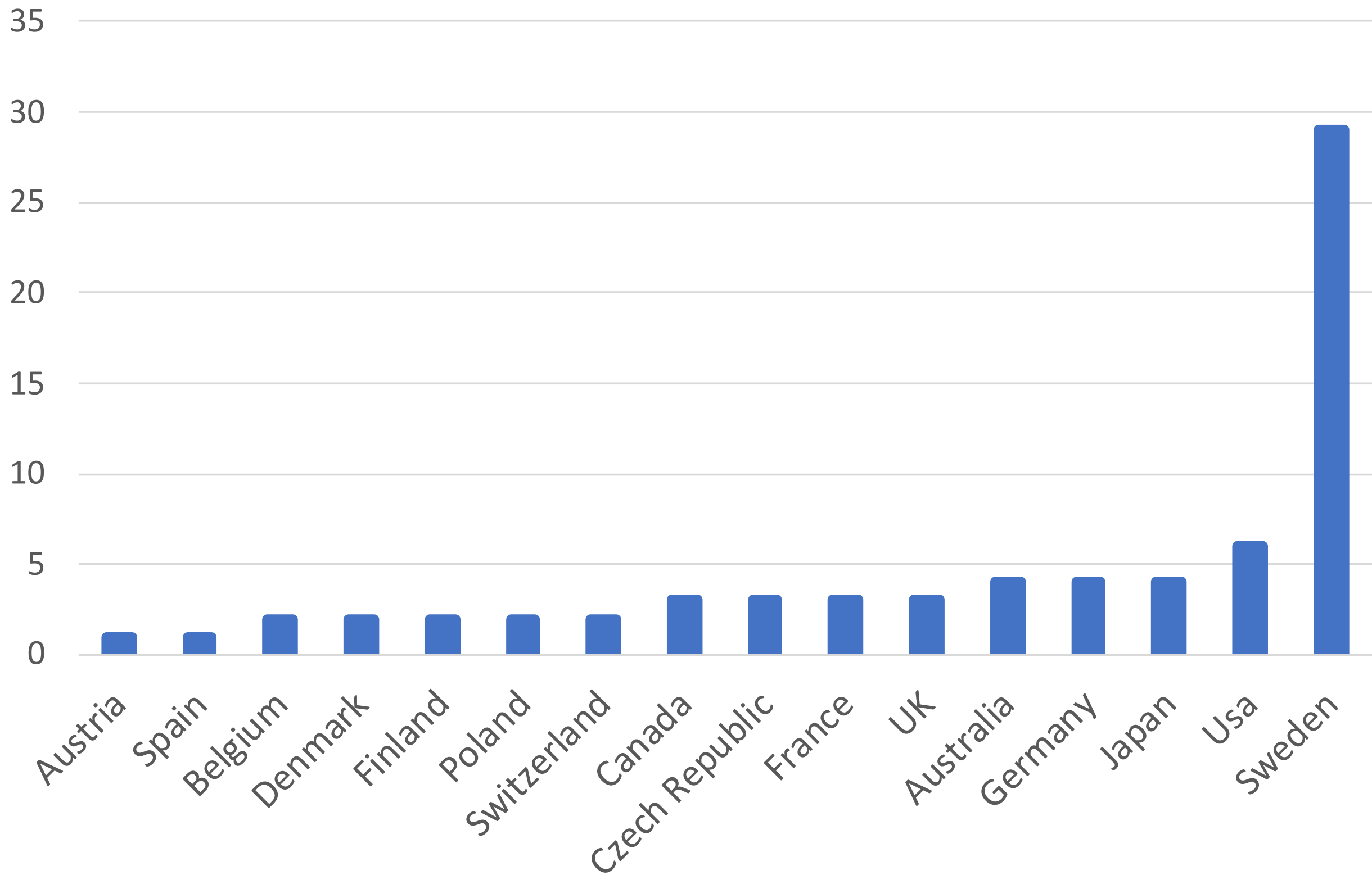


you

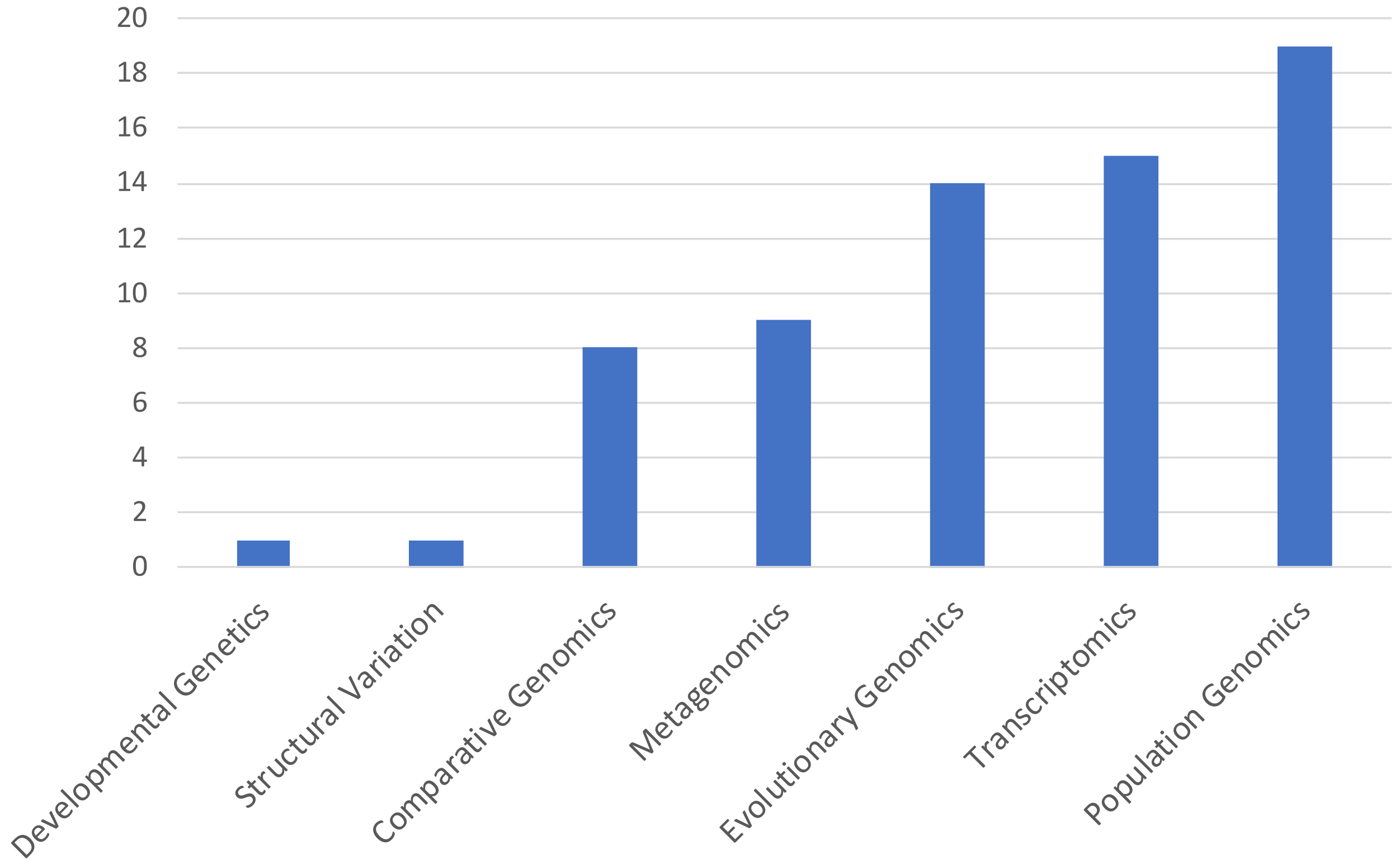
Professional Level



Regional Affiliation



Research Interest



us

instructors: your new best friends



Andrew



Mahwash



Karin



Alyssa



Joan

co-directors



Dag



Sophie



Brian



Josie



Sonya



Scott



Guy

Previous Co-directors



Karin



Konrad

faculty: week 1



Sonya Dyhrman



Mike Zody



Hannah Tavalire



Sophie Shaw



Josie Paris



Rayan Chikhi



Malachi Griffith



Zach Skidmore

faculty: week 2



Bill Cresko



Julian Catchen



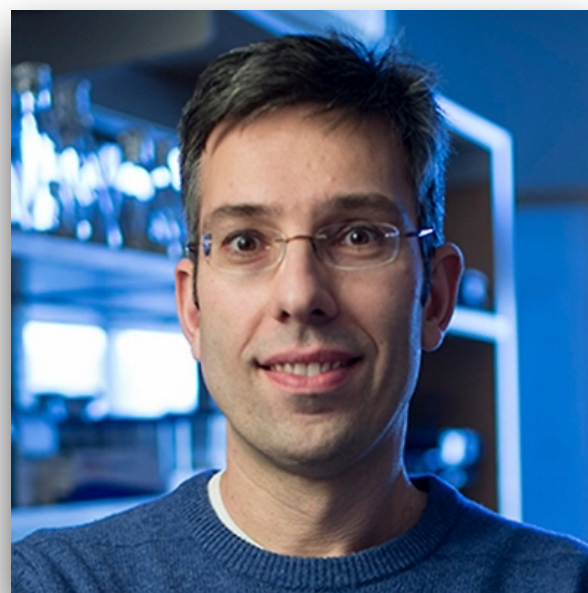
Amy Willis



Daniel McDonald



Brian Haas



Antonis Rokas




Chris Wheat

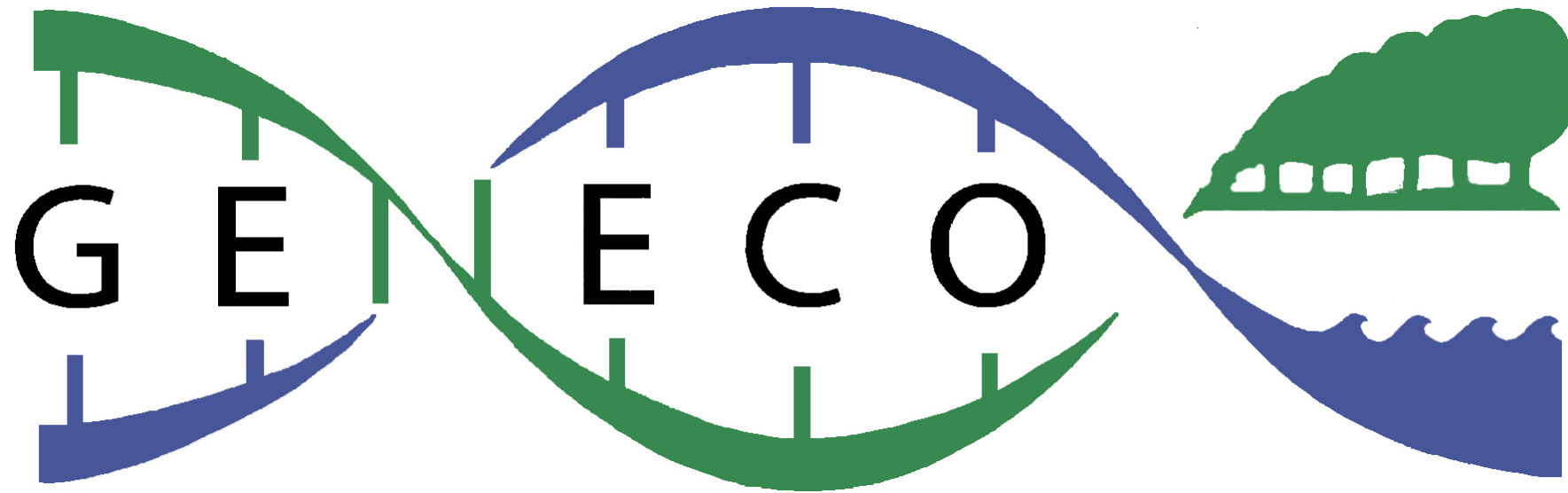
faculty lunches

- outstanding opportunity to network with faculty
- some faculty are only here for a short period of time, so take advantage of the lunch

Miscellaneous

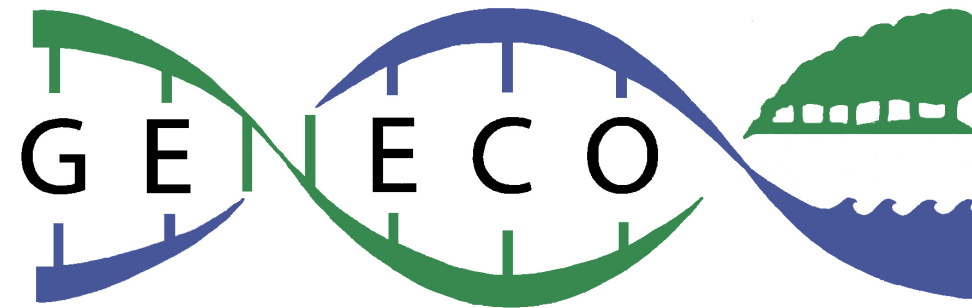
- Instance Addresses
- Faculty lunch 
- Scientific speed networking
- T-shirt competition

partners



Graduate Research School in Genomic Ecology
LUND UNIVERSITY, SWEDEN





- Interdisciplinary graduate school for PhD students in Genomic Ecology
- Genomic Ecology - interface between ecology & evolution, molecular biology and genomics
- GENECHO was funded by the Swedish Research Council, from 2013 by the Faculty of Science, Lund University



GENECO program

PhD students & content

- Universities in Sweden, Norway, and Finland
- Activities: Annual Winter & Summer Meetings, PhD courses, Mentor programs, travel grants

Courses

- Understanding population genetics
- Using Phylogenetic Trees to Study Trait Evolution
- High-Dimensional Data Analysis in Ecology and Evolutionary Biology Using R
- Quantitative PCR

see www.biology.lu.se/geneco

Sponsor of Workshop on Genomics



National Bioinformatics Infrastructure Sweden

Short term support: (300+ projects)

Long term support: 500 hours (20+ projects)

Bioinformatics compute and storage (UPPNEX) specifically for NGS data

NBIS provides infrastructure and tools for:

- ▶ Bioinformatics analyses
- ▶ Bioinformatics training and workshops
- ▶ Advisory Programme for PhD students

Nodes at each of the 6 large Swedish university cities

see www.nbis.se

what
history
concepts

history



Woods Hole Workshop on Molecular Evolution



Michael Cummings
Director



Scott (me!) &
Antonis



TA TA



Michael & Scott
have dinner in DC



Mitch Sogin
Director

1988

2000

2001

2002

2007

Walter Salzburger
Student

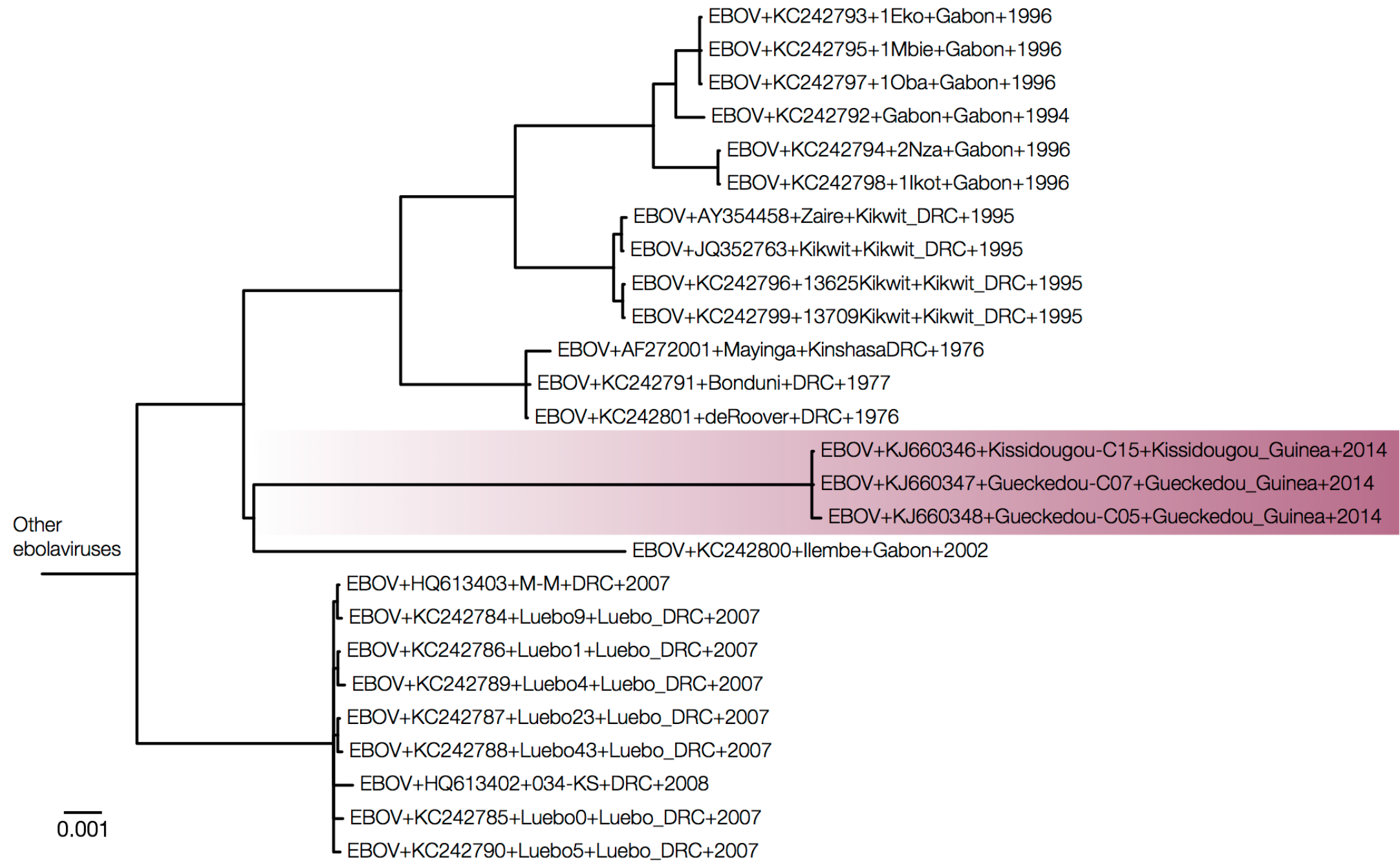


CDC

**CENTERS FOR DISEASE
CONTROL AND PREVENTION**



CDC loves trees



why Český Krumlov?



what is a Cheskie Kroomlav?

CZECH REPUBLIC



why Český Krumlov?

- reasonably priced
- relatively close to major airports
- three I's
 - Isolated
 - Idyllic
 - Infrastructure
- support from the local community



workshops go global



Michael & Scott
have dinner in DC

Workshop on
Genomics
Český Krumlov

Workshop on
Phylogenomics
Český Krumlov

2007

2008

2009

2011

2016

2017

Workshop on
Molecular Evolution
CDC

Workshop on
Molecular Evolution
Český Krumlov

Workshop on
Population and Speciation
Genomics
Český Krumlov

concept

Week 1: Fundamentals

Study
Design

UNIX

Assembly

Mapping

Stats

Data
QA / QC

Visualization

R

Topical

Week 2: Subject Specific

Transcriptomics

Population
Genomics

Evolutionary
Genomics

Microbiome

Phylogenomics

Study Design

Topical

schedule in detail

<http://evomics.org/workshops/workshop-on-genomics/2019-workshop-on-genomics-cesky-krumlov/>

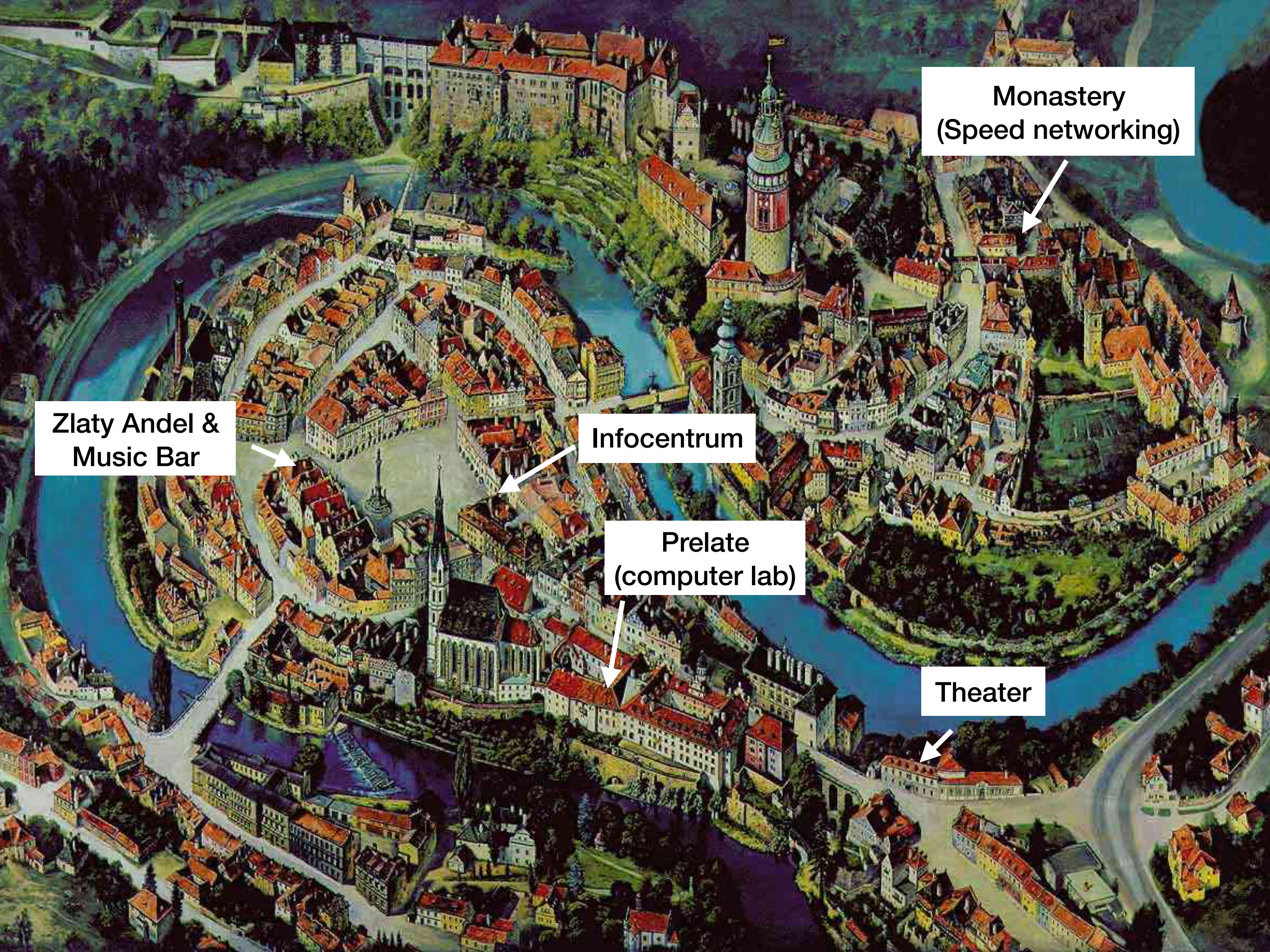
social events

- Saturday
 - meet at 18:00 in the Town Square for a group tour of Český Krumlov
 - tour will finish at Depot for dinner
- Sunday
 - free day. More information from Daniel Kintzl shortly
- Friday
 - you plan end-of-workshop dinner / party

communication during the workshop

- website: <http://evomics.org>
- twitter: #evomics2019
- facebook: Workshop on Genomics
- slack: evomics2019.slack.com

key locations



Monastery
(Speed networking)

Zlaty Andel &
Music Bar

Infocentrum

Prelate
(computer lab)

Theater


expectations

phenomena

- exhaustion
 - watch your health
 - stay hydrated
 - let a staff member know if you are not feeling well
- frustrations
 - you will likely not finish every step of every exercise
 - application bugs, connectivity issues
- you will not become an expert in 2 weeks

approach and attitude

- patience!
 - we have 2 weeks together!
- sleep
- ask questions (Slack)
- everything will be available on the web after the course is over
- have fun, make new friends and colleagues, enjoy Krumlov
- **WORK WITH YOUR NEIGHBORS**



Won't you be my neighbor?


```
awk '{print $3 "/t" $4}' text.txt
```



Thanks neighbor

computer lab

- dates back to the 2nd half of the 14th century
- one of the oldest buildings in Krumlov (Gothic period)
- has housed several breweries between the 1596 - 1865
- important for us:
 - fully wired and wireless internet
 - power distribution



lab policy

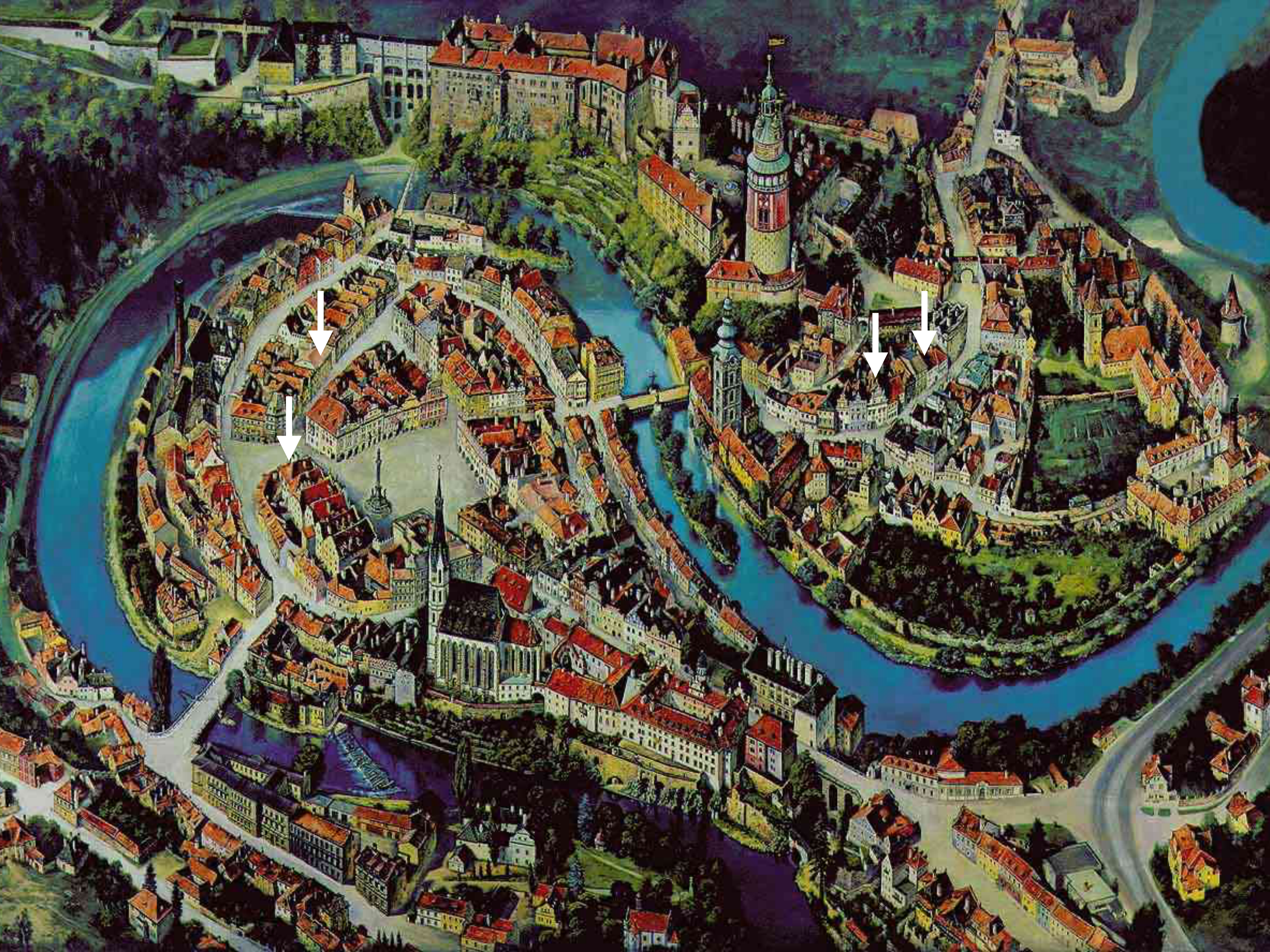
- no food or drink inside the computer hall
- wipe feet before entering
- coats in the coatroom
- do not touch the walls (frescoes) - painter died in 1791
- strict arrival and departure times
- wash your own coffee mugs



post lab discussions

- important feature of the Workshop
- Music bar (tonight), Festi Bar, Zappa Bar, Apotheke





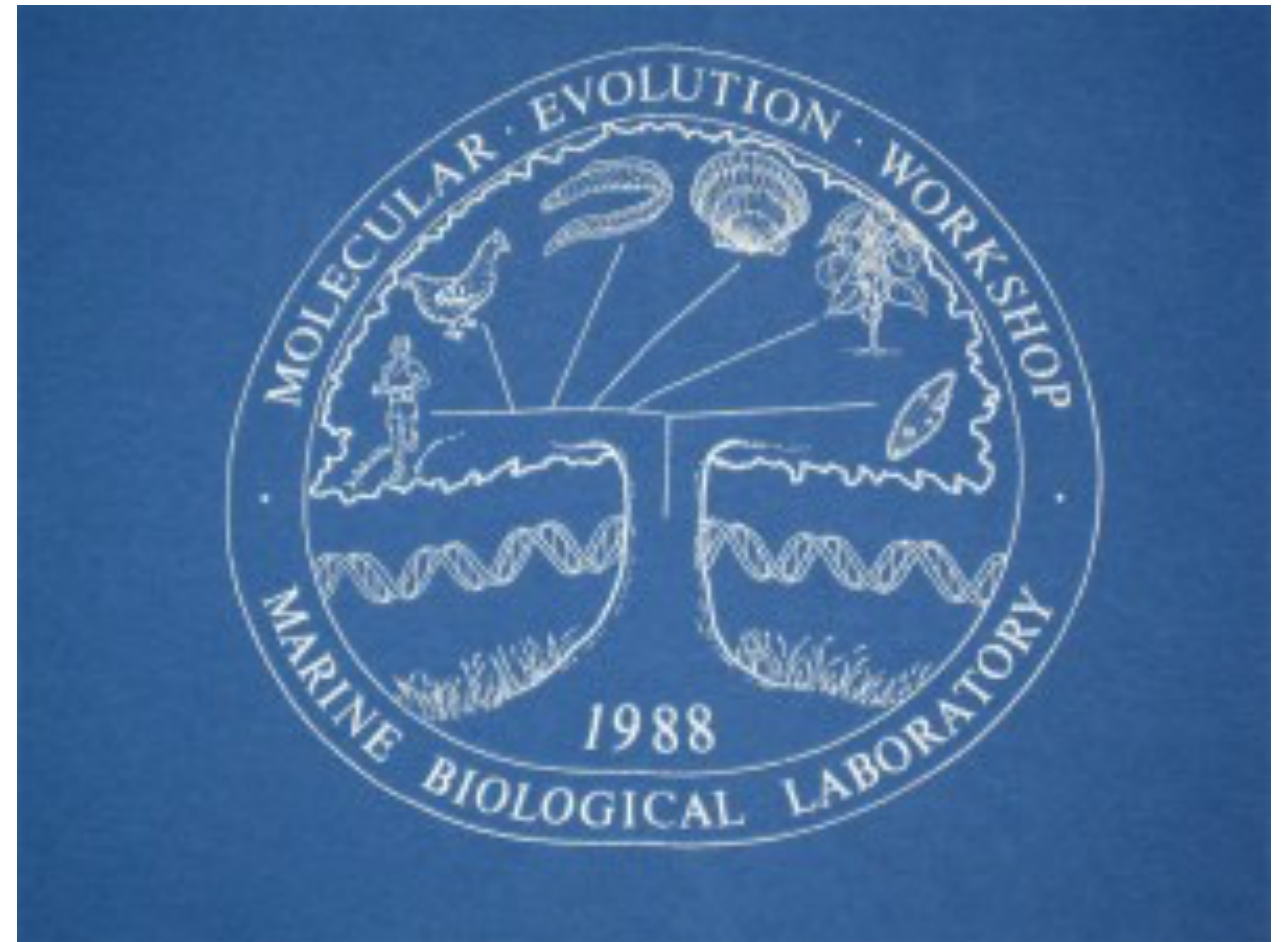
miscellany

t-shirt competition

- top design will be awarded with a special gift from the town
- **submit by THURSDAY, 10-January!**

Miscellaneous

- Instance Addresses
- Faculty lunch
- Scientific speed networking
- T-shirt competition



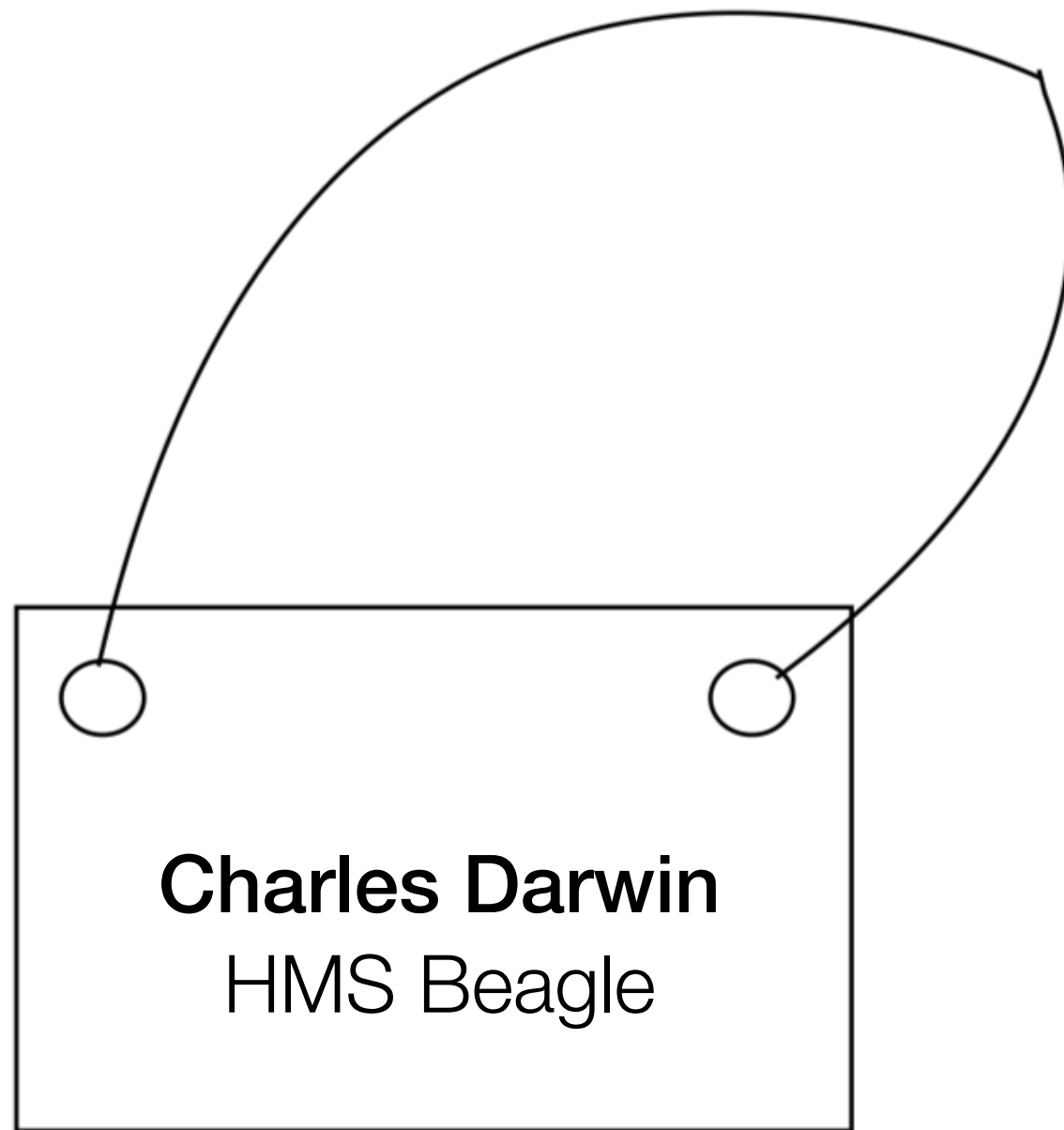
workshop BINGO

Workshop on Genomics 2019		BINGO !		#evomics2019
Tell a pun to Karin	Tried 5 different Czech beers	Worn name tag visible every day	Tried Becherovka	Had Tredlnik
Did Yoga or Castle Run	Get Rayan to say "De Bruijn graph"	Workshop dinner and party	Joined in a faculty lunch	Do the macarena with Sophie
Tweeted using the #evomics2019 hashtag	Give Andrew a 30 sec synopsis of another student's research	Registration party	Helped neighbour with exercise	Contributed to T-shirt competition
Arrived on time for every lecture	Command failed because in wrong directory	Had a Mojito with Guy	Asked a question after a lecture	Learned 5 Czech words/phrases
Eat at the Meat Dungeon	Danced with the TAs/faculty	Seen someone asleep in a lecture	Tea with Josie	Find true nationality of 10 instructors / directors

scientific speed networking

- tonight: Monastery (19:30)
- goals:
 - get to know each other
 - identify shared interests
 - learn approaches and methods other participants work with

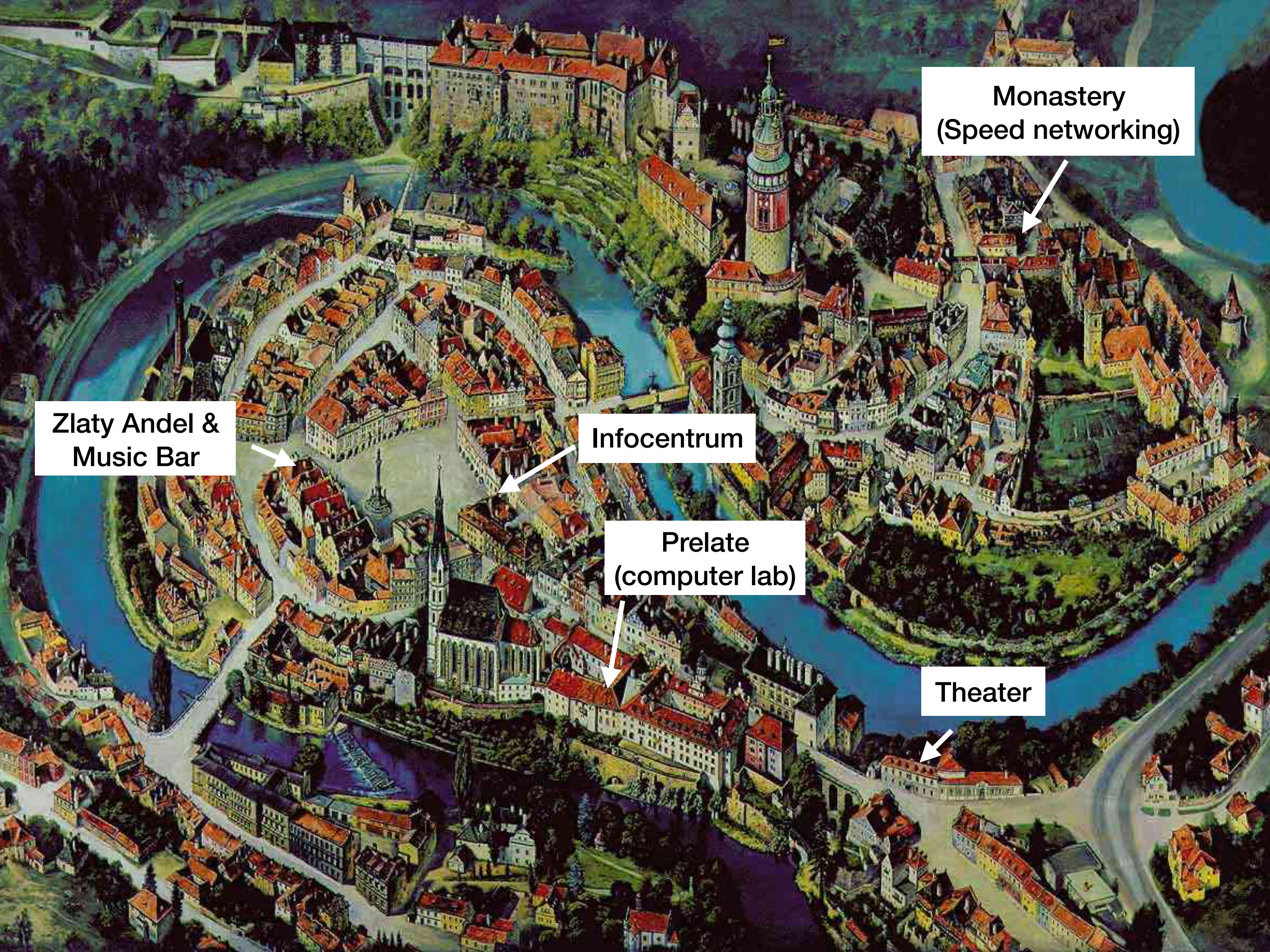
wear your name tag!



next

- information from Daniel Kintzl
- group photo
- walk to house of prelate
- Extended 1st day lunch break
- 14:00 (2pm) lecture from Sonya (here)
- 19:30 (7:30pm) speed networking (Monastery)





Monastery
(Speed networking)

Zlaty Andel &
Music Bar

Infocentrum

Prelate
(computer lab)

Theater



thank you and
WELCOME!

