

# Last Jbrowse release: 1.2.1

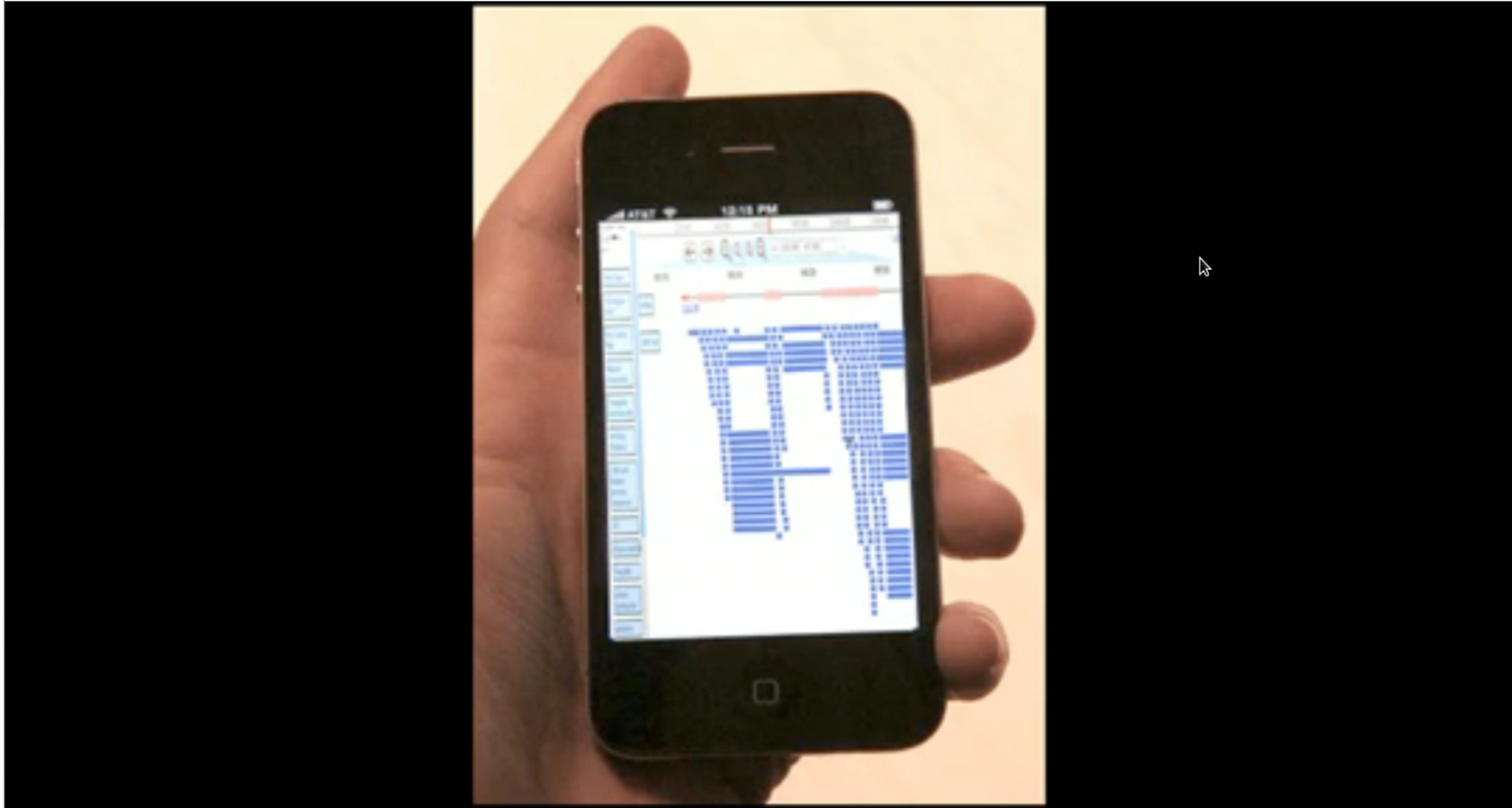
- In March
- UCSC import
- Touch (Juan Aguilar)

# Since then...

- Mitch
  - Startup
- Lincoln Stein lab
  - Adam Wright
  - Natalie Fox
- Ian Holmes lab
  - Stephen Cummings
- Suzi Lewis's group at LBL
  - WebApollo

# TEDx Boston talk by Richard Resnick

TEDxBoston 2011, Filmed Jul 2011; Posted Sep 2011



Subtitles Available in: 12 languages [Off]



08:43 | 11:03

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# Mitch

- Counsyl
- Worked on JBrowse there (open source)
  - JSON format cleanup
  - Python implementation of server-side code
  - Callbacks

# Adam Wright

- Lincoln's co-op student
- Gbrowse->JBrowse migration work

# Natalie Fox

- Lincoln's co-op student, took over from Adam
- Track hierarchy
- Faceted track browsing
- Overview track
- Popup menu
- Track customization
- Elastic Drag Zoom

# Track Hierarchy

Enter text to search track list:

clear search

Available Tracks:  
(Drag → to view)

reset list order

Find Tracks

- Favourites
- + SequenceTrack
- General
  - Conservation
- Gene Model features
  - Gene Span
  - mRNA
- + Genomic reagents and data
- Genomic features
  - Cytological band
  - Natural transposon
  - Transgene insertion site
- + Mapped features
- + Prediction features
- + Similarity: Synteny features



# Faceted Track Browsing

**Experiment Type**

- 2 (missing this field)
- 3 5'RACE
- 7 ChIP-Seq
- 8 RNA-Seq
- 2 RTPCR

**Protocol**

- 9 (missing this field)
- 11 Deep Sequencing
- 1 mRNA purification from total

**Tissue**

- 2 (missing this field)
- 5 adult ovaries
- 15 whole fly

**Data Source**

- 18 (missing this field)
- 2 FlyBase
- 2 modencode

**Strain**

- 22 (missing this field)

[clear selected tracks](#)

**Click on the track name below to display/hide the track.**

22 Items ✕

sorted by: labels; then by... •  grouped as sorted

- cDNA and Aligned genomic sequences
- Conservation
- Cytological band
- DNA enhancer
- Gene Span
- mRNA
- Mutation: deletion
- Mutation: insertion site
- Mutation: point mutation
- Mutation: sequence variant
- Natural transposon
- Non coding RNA
- Oligonucleotides
- Ortholog (FlyBase)
- protein binding site
- regulatory region
- rescue fragment
- Tiling BAC
- Transgene insertion site
- tRNA
- XRate predictions

[Show only the first 10 results](#)

0      5,000,000      10,000,000      15,000,000      20,000,000

← → ⊖ ⊕ 2L ↗ Link

13,222,878 .. 13,274,458 Go

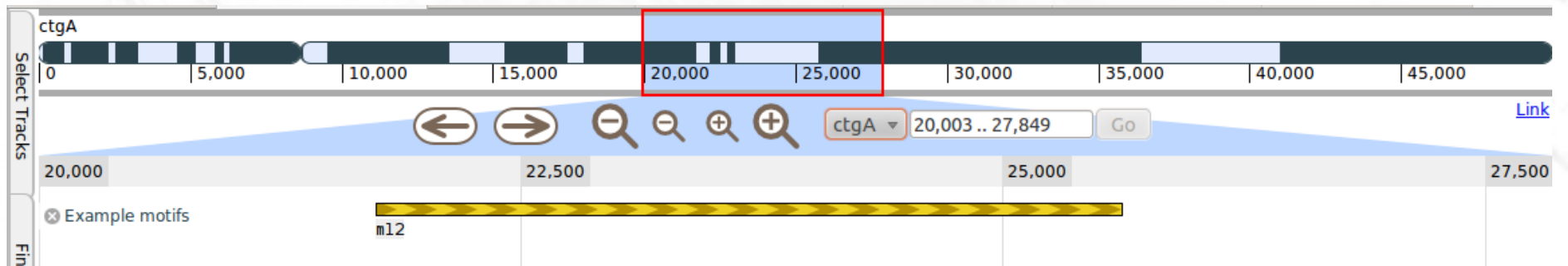
13,225,000      13,250,000

**Find Tracks**

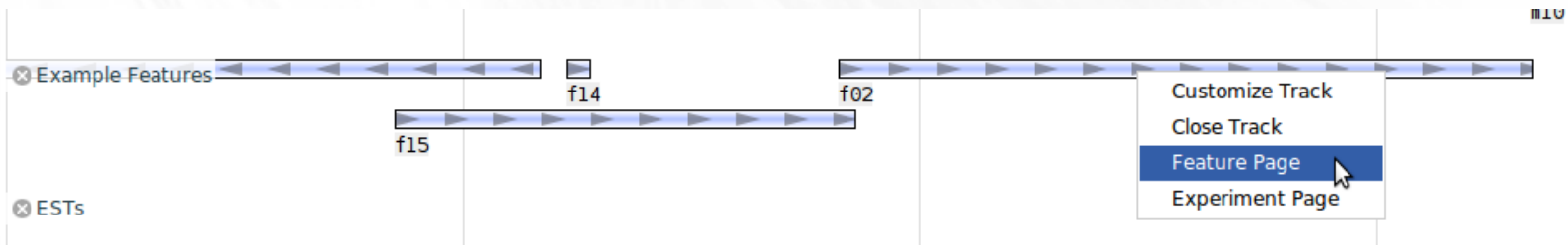
- Conservation
- Cytological band
  - band-34A11
  - band-34B1
  - band-34B2
  - band-34B3
- Tiling BAC
- Transgene insertion site
- Gene Span
  - [iBb](#) [CG16813](#) [CG15479](#) [CG5945](#) [snRNA:U2:34ABc](#) [CG31728](#) [CG6043](#)
  - [i6](#) [CG15480](#) [CG16815](#) [CG5867](#) [snRNA:U5:34A](#) [CG31851](#) [CG31848](#)
  - [CG16812](#) [Prosa1pha6T](#) [CG16820](#) [CG31730](#)



# Overview Track




# Popup menu



# Track Customization

Select Tracks

Customizing Example motifs track



apply changes cancel

height: select new height ▾

fill color: select new fill color ▾

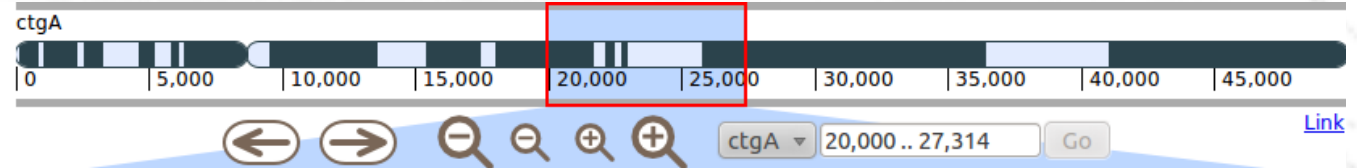
track image: select new track image ▾

border color: select new border color ▾

border color: select new border width ▾

Find Tracks

ctgA



0 5,000 10,000 15,000 20,000 25,000 30,000 35,000 40,000 45,000

20,000 22,500 25,000

Example motifs  
m12

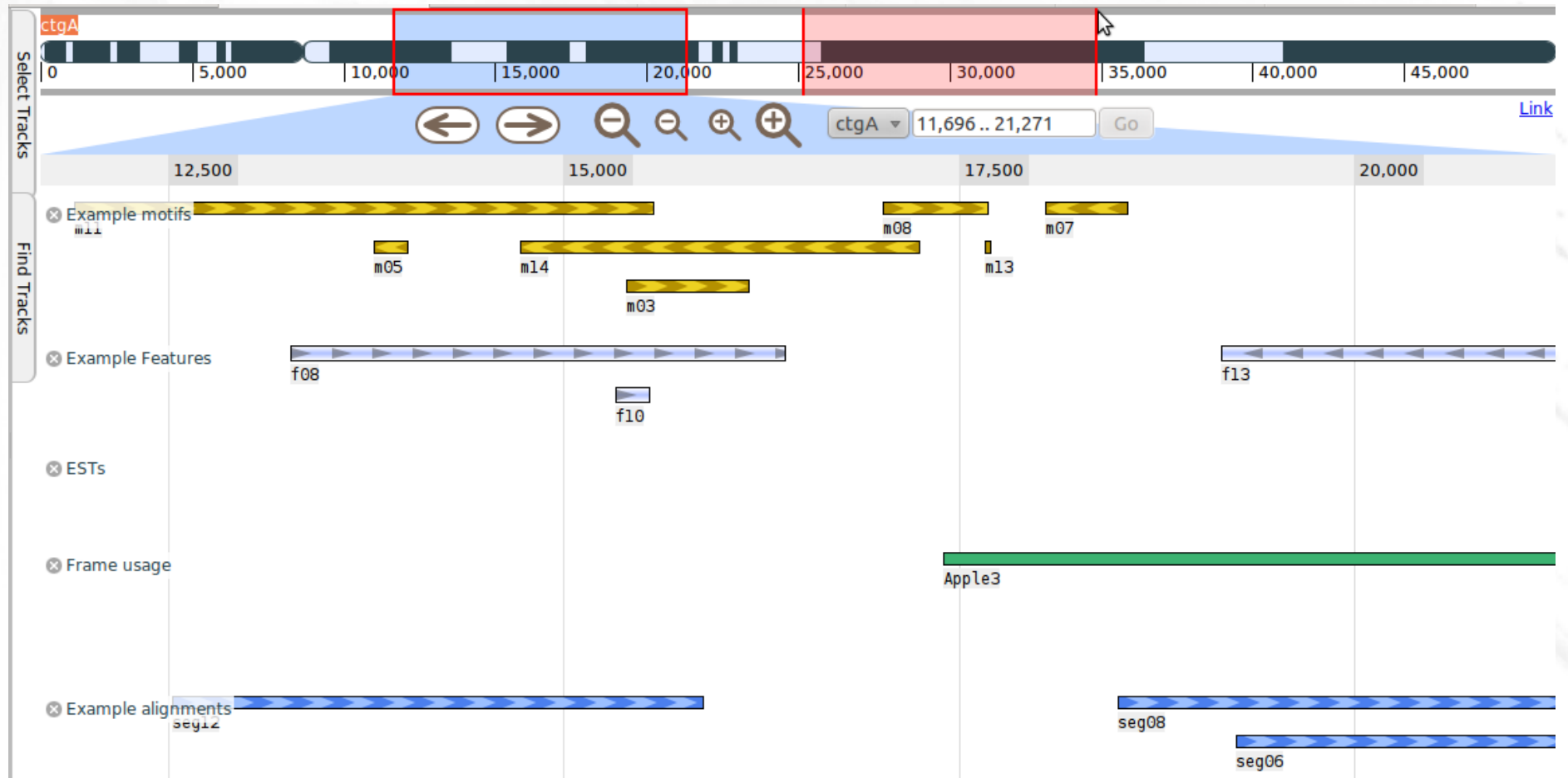
Example Features  
f14 f02  
f15

ESTs

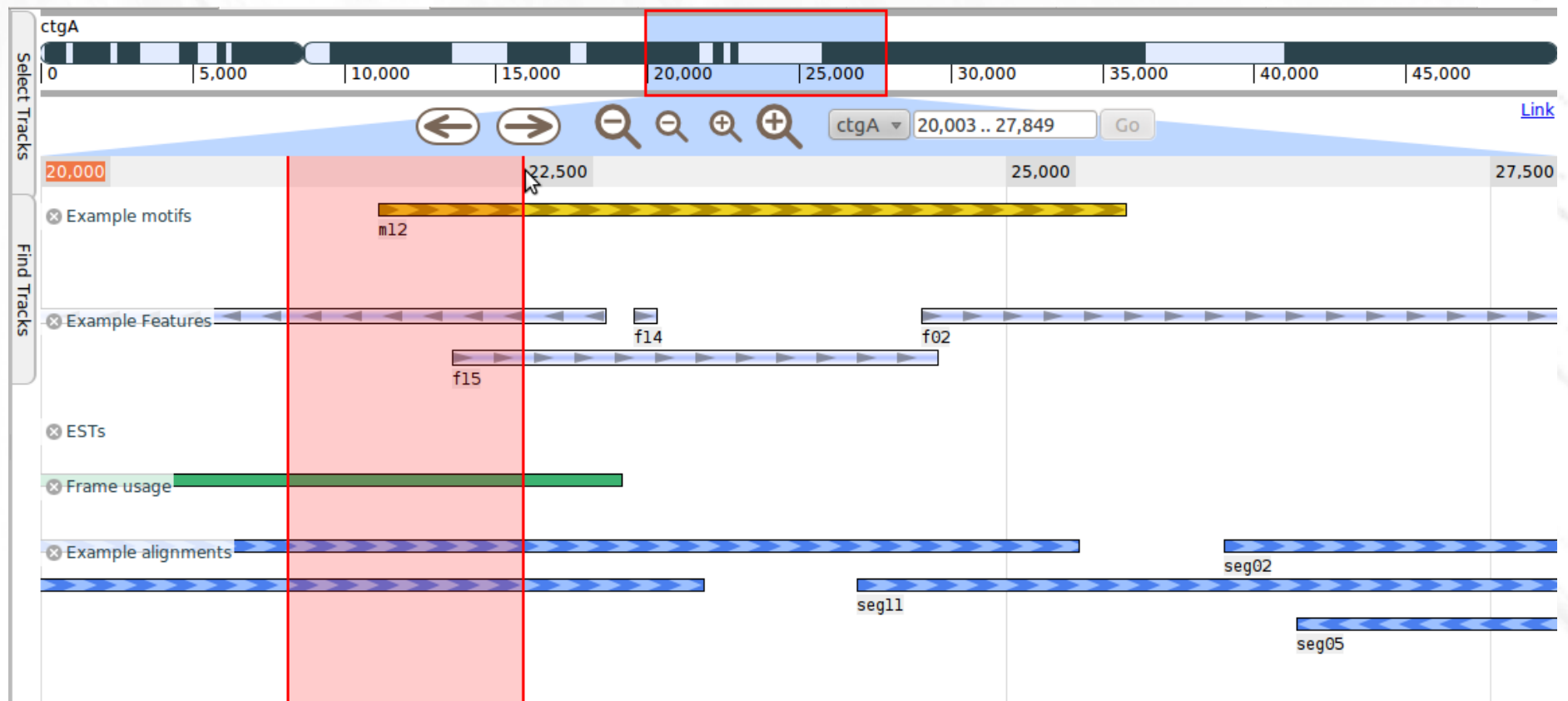
Frame usage

Example alignments  
sea02

# Elastic Drag Zoom: overview



# Elastic Drag Zoom: display area



# Stephen Cummings

- Documentation work:
- <http://gmod.org/wiki/JBrowseDev/Current>

# “WebApollo”

- Facilitate collaborative annotation
  - Make it easier for annotators to participate
  - Facilitate annotation sharing/integration
    - (real time!)
- Demo
  - <http://icebox.lbl.gov:8080/ApolloWeb/login.jsp>
  - login as username: "write\_1"
  - password: "write\_1"

# **JBrowse update**

Mitch Skinner



# EPFL BBCF

<http://svitsrv25.epfl.ch/BED/jbrowse/>

# Coordination

- Some people are starting to do similar things in different places
- Useful parallel exploration of solution space, or duplication of effort?

JBrowse conference call  
Third Monday of the month  
2pm Pacific  
Next one is Oct 17<sup>th</sup>

# Mitch: post-startup

- Took some time off
- Now working part-time (40%) with Suzi Lewis's group on Web Apollo
- Interested in working with more groups

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# People

- Ian Holmes lab (Berkeley)
  - Stephen Cummings
  - Oscar Westesson
- Lincoln Stein group (OICR)
  - Natalie Fox
  - Adam Wright
- BBOP (Suzi Lewis's group)
  - Gregg Helt
  - Ed Lee
  - Nomi Harris
- BBCF (EPFL)
  - Yohan Jarosz
  - Lucas Sinclair