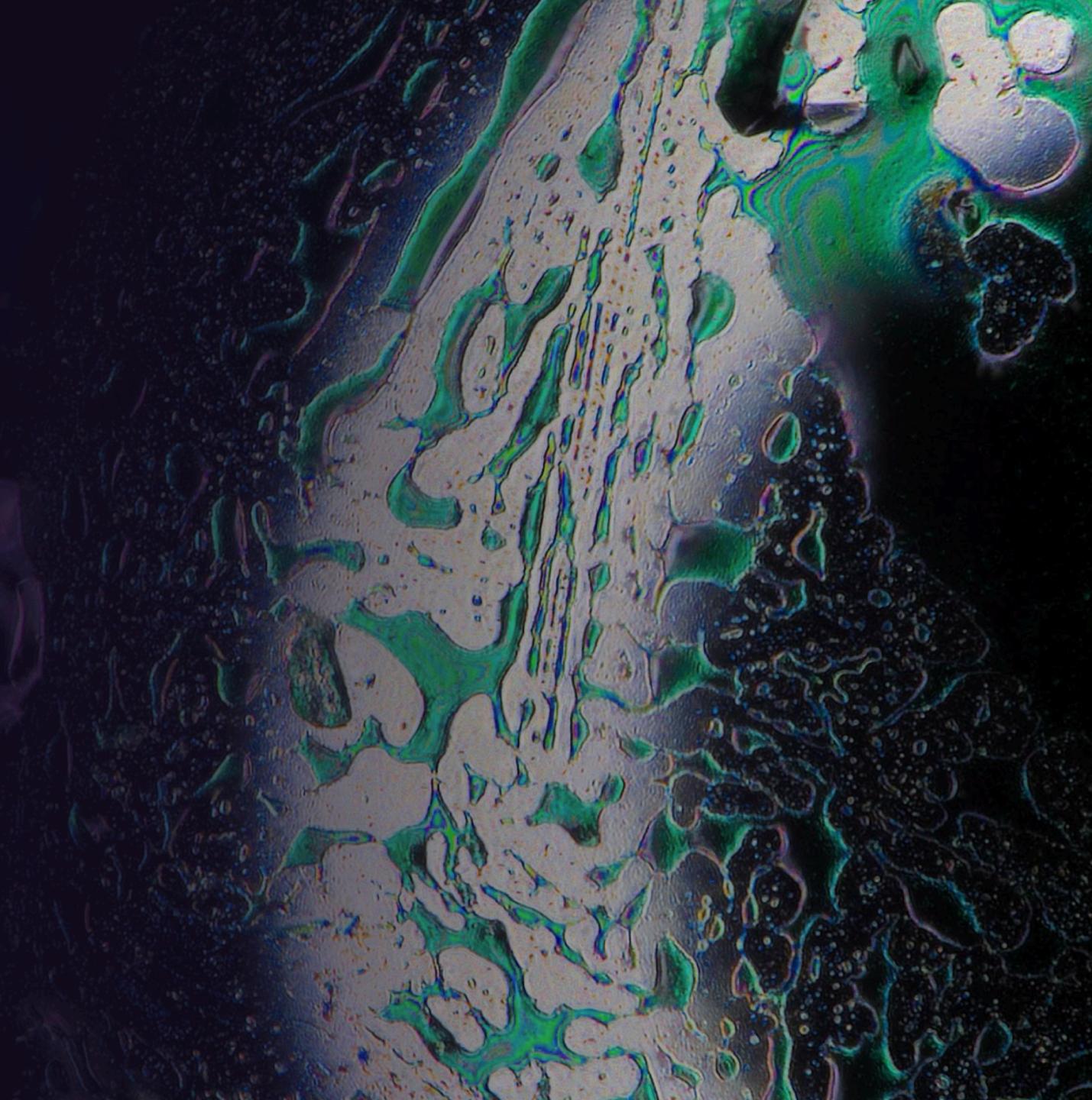


# **Community updates**

Major projects and initiatives from the past 12 months.



## Modern software engineering - for science

## Empowering scientists with modern software engineering

Nextflow enables scalable and reproducible scientific workflows using containers. It allows the adaptation of pipelines written in the most common scripting languages.

Its fluent syntax simplifies the implementation and deployment of complex parallel and reactive workflows on any cloud or cluster.

# Knextflow

workflow management







# Modern software engineering - for science

### A community collaborating on pipeline development

Pipelines follow best-practices to ensure maximum portability and reproducibility. The large community makes the pipelines exceptionally well tested and easy to run.

Extensive documentation covering installation, usage and description of output files ensures that you won't be left in the dark.



nf-core T



# Community growth

Where we are in numbers







### Developers committing to nf-core GitHub repositories









### People following for Nextflow + nf-core X (twitter) accounts

# 

# 







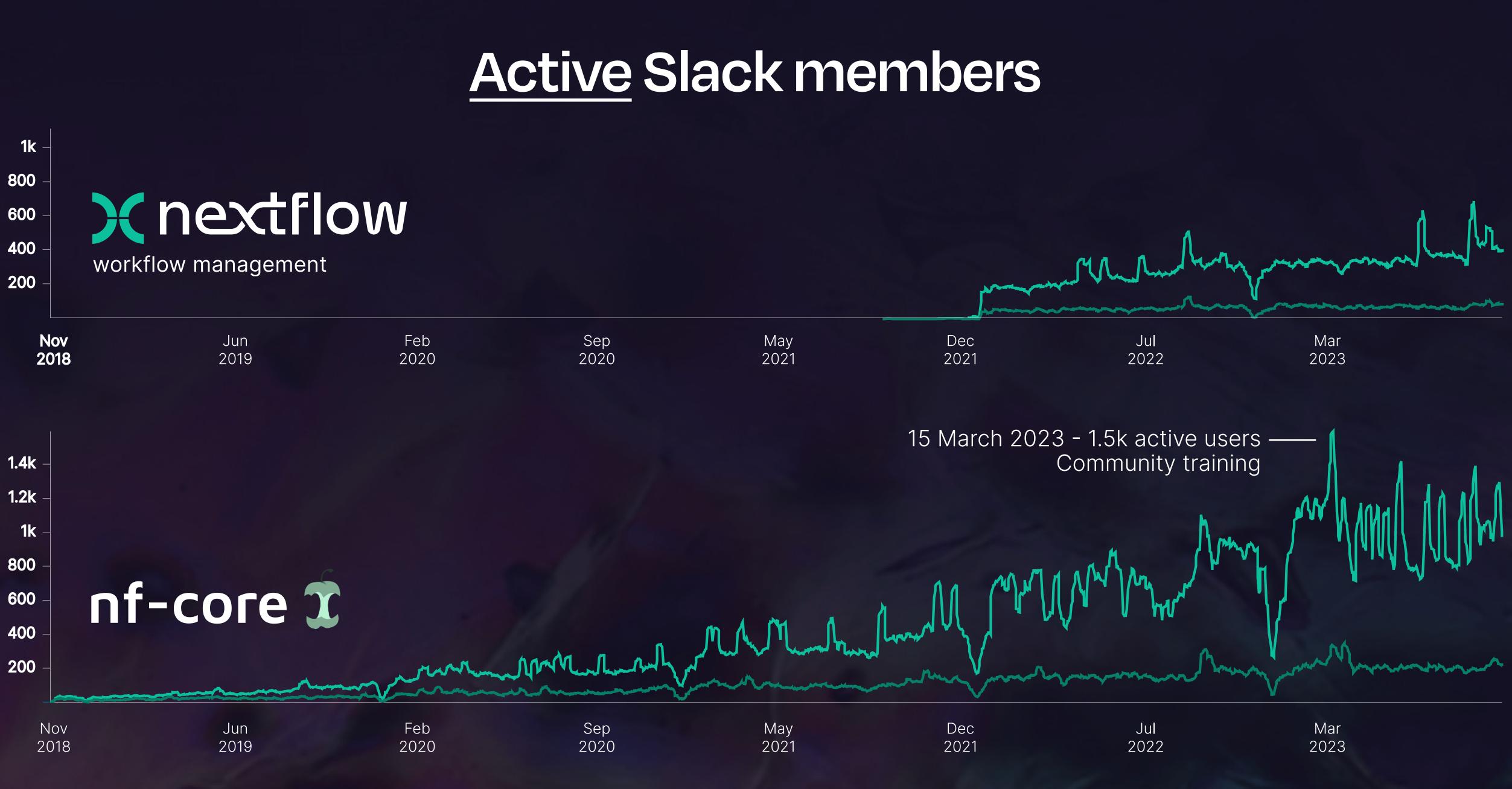
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Users on Nextflow + nf-core Slack Organisations





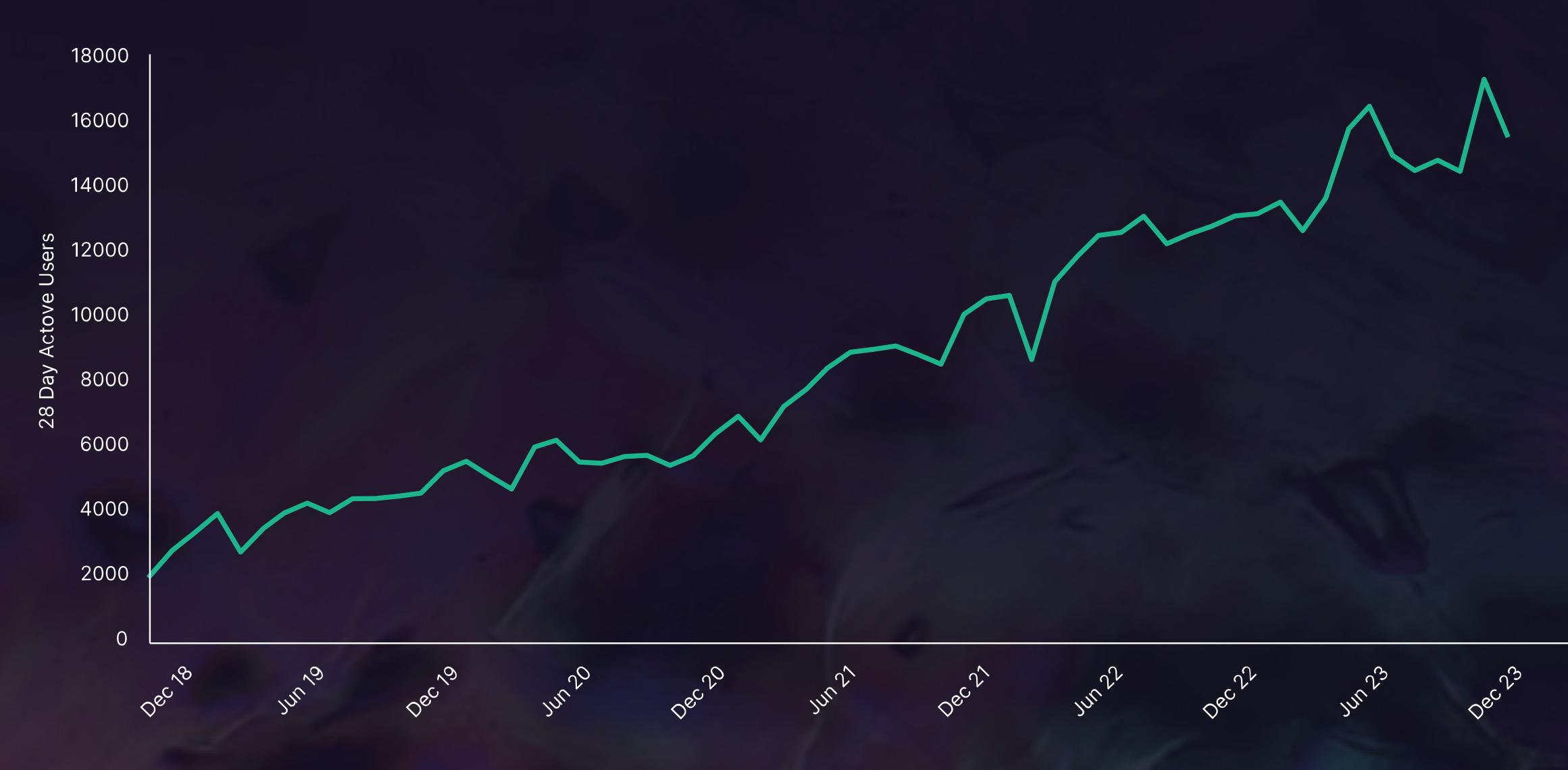


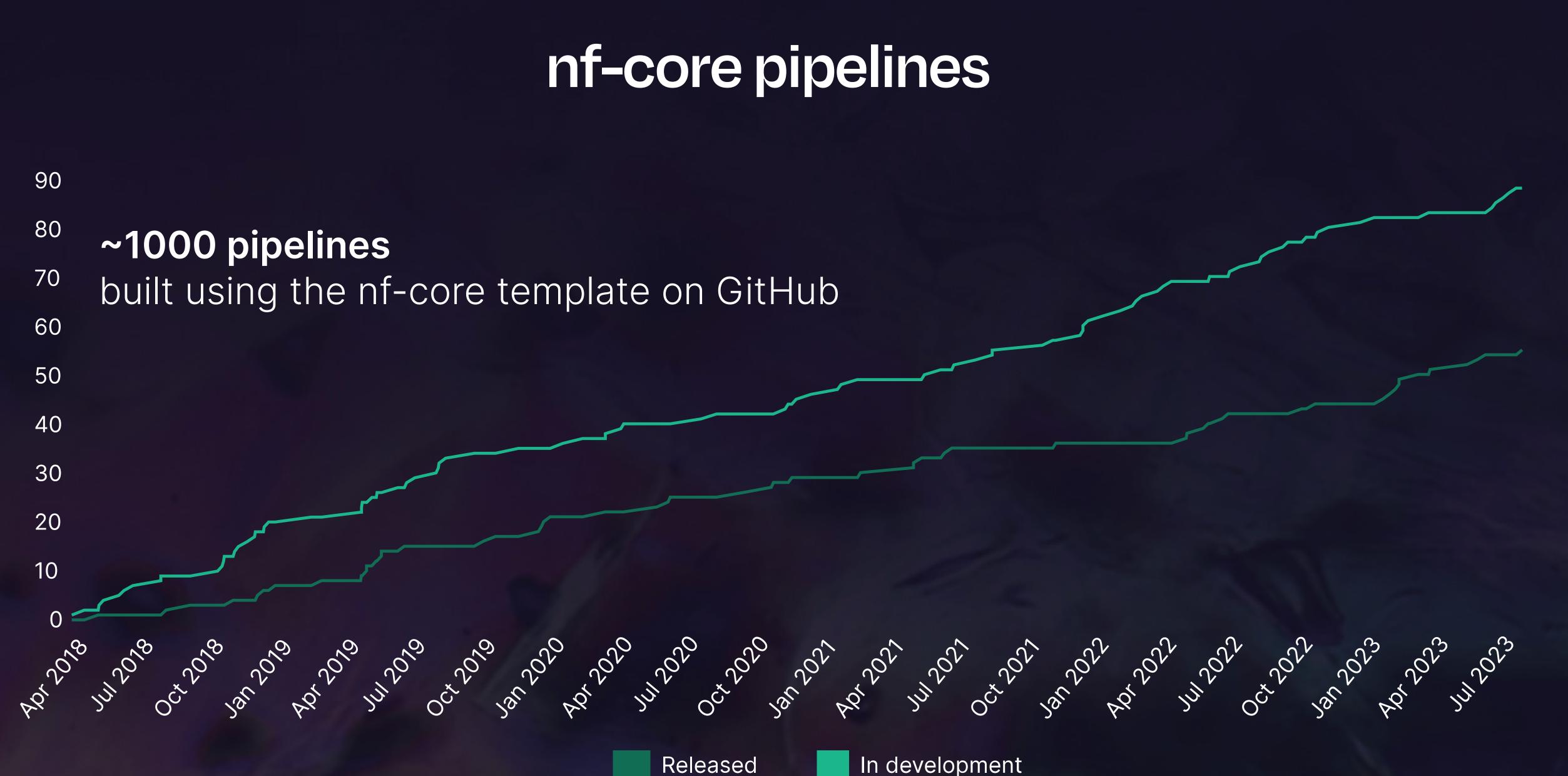


Weekly active members

Members who posted

## Nextflow Docs - Unique IPs





In development

## nf-core modules + subworkflows

## Pipeline

Pipeline parameters Resource requests Tool arguments Input channels

## Subworkflow

Channels

Pipeline logic

## Module

## Module

## Module



## nf-core modules + subworkflows

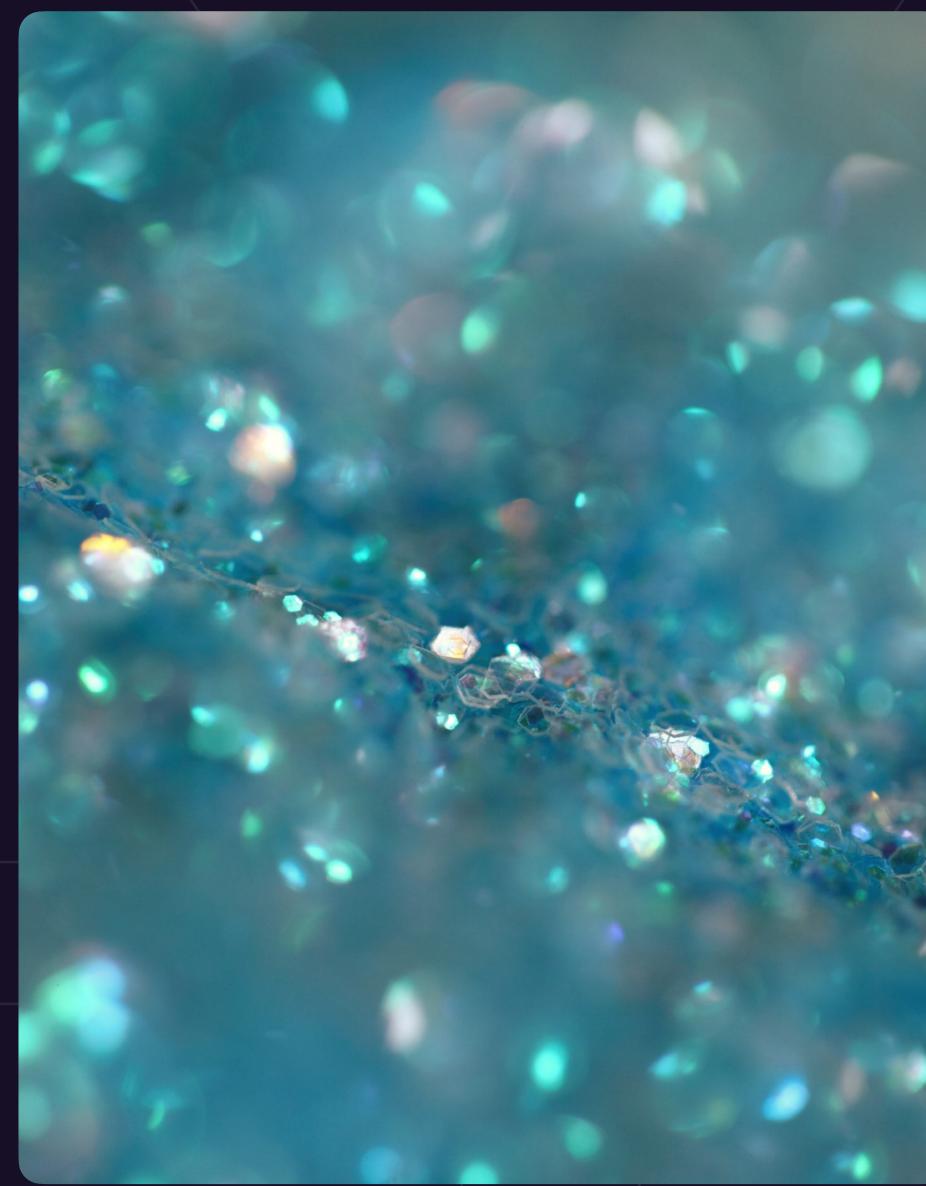


Modules currently available as part of nf-core.



# Community projects

New infrastructure to support users and developers





## **Better automated testing**



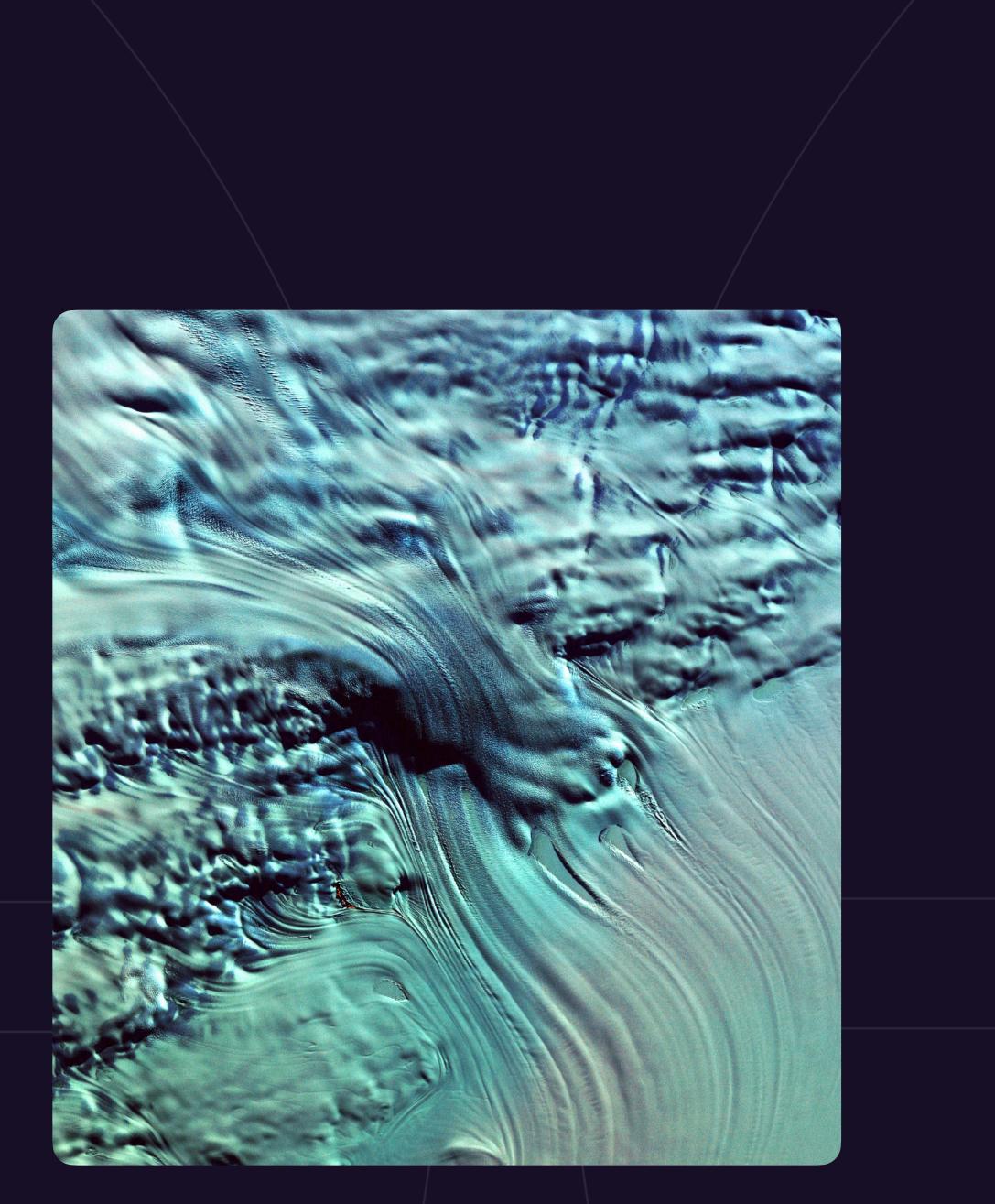
Lukas Forer Thurs Oct 19, 5:15 PM



### Ensuring code quality through CI

- Adopting s nf-test for all nf-core pipelines, modules and subworkflows
- Full-size release tests with AWS and Azure
- New AWS auto-scaling CI runners for GitHub pull-requests - now with GPU!









## Nextflow plugins

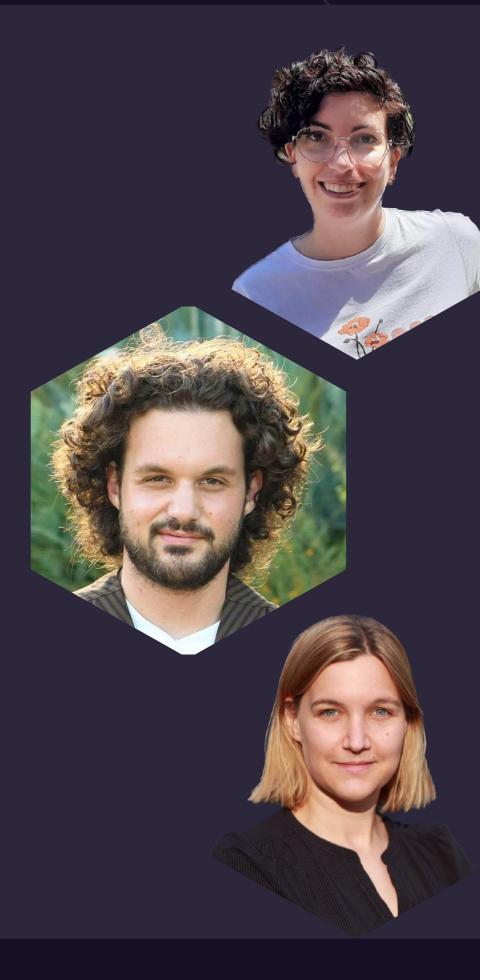
### nf-validation

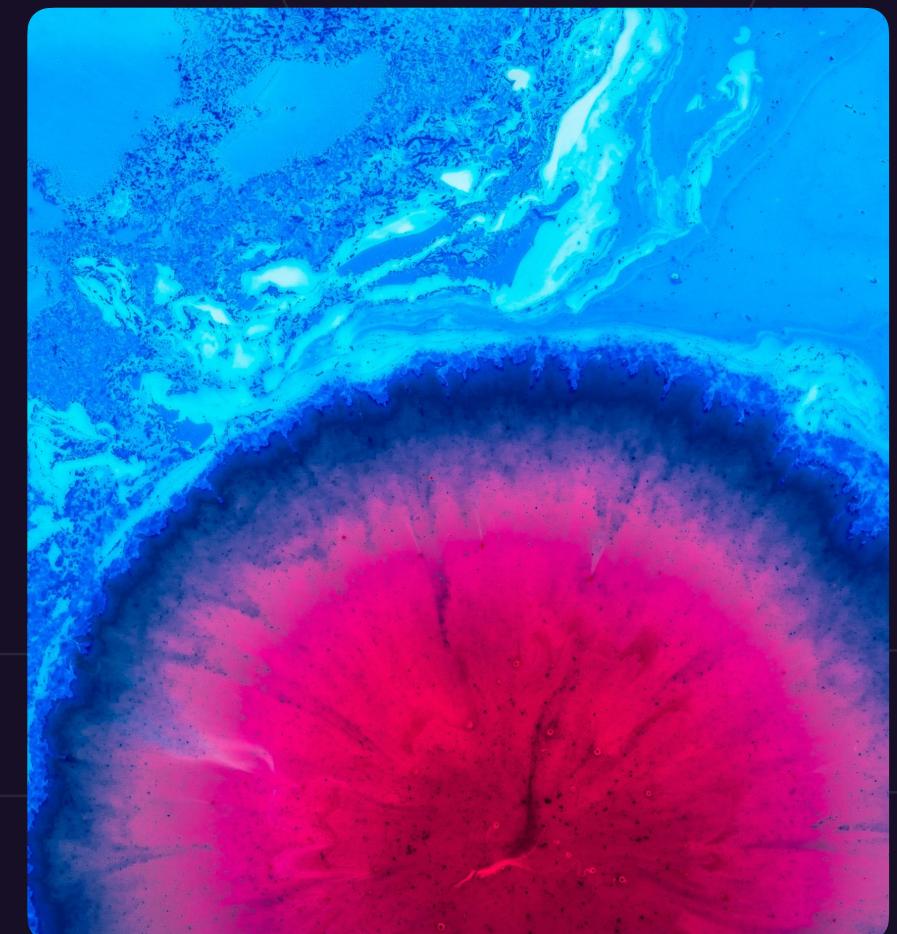
Júlia Mir Pedrol Thurs Oct 19, 10:30 AM

nf-prov Ben Sherman

### nf-co2footprint

Sabrina Krakau Thurs Oct 19, 12:45 PM











# Nextflow plugins

### nf-validation

Júlia Mir Pedrol Thurs Oct 19, 10:30 AM



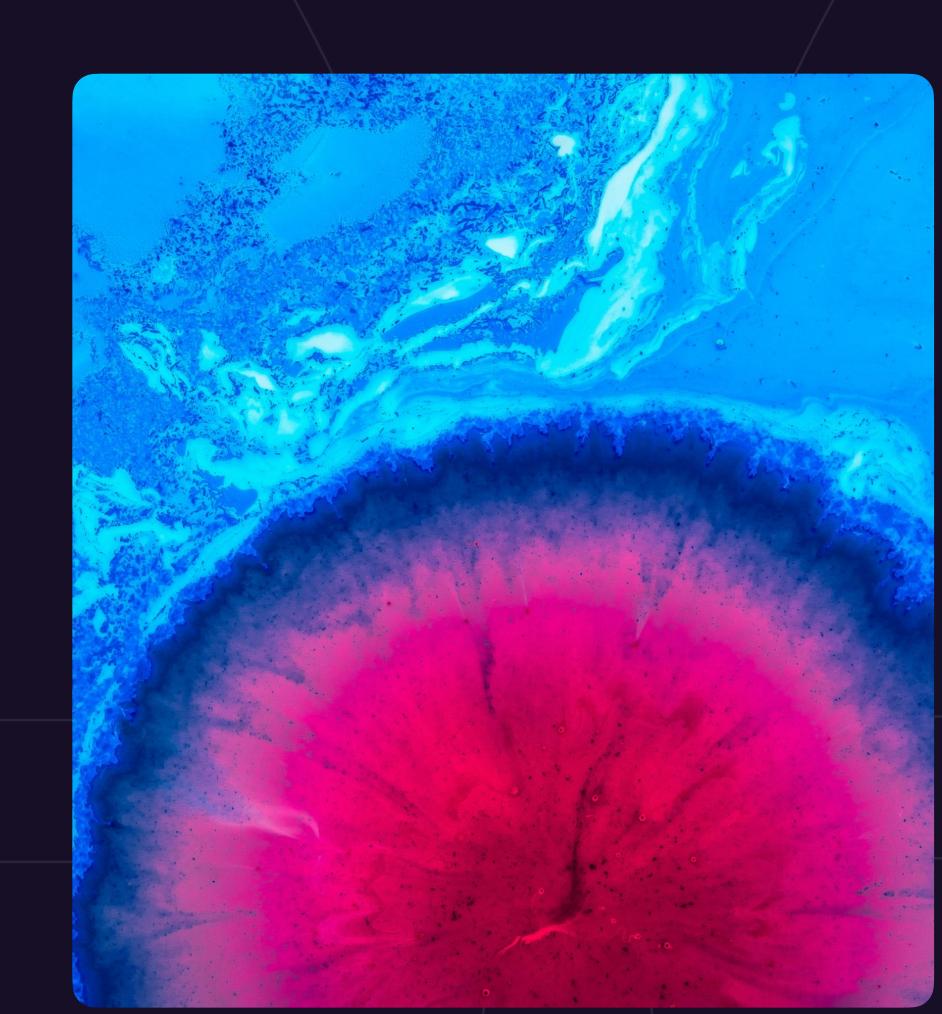
nf-prov Ben Sherman

# Quilt

### nf-co2footprint

Sabrina Krakau Thurs Oct 19, 12:45 PM











## New nf-core website

### Rebuilt from the ground up

- Site-wide search!
- Deployment previews
- Support for MDX, markdown extensions
- Markdown front-matter schema
- New hosting







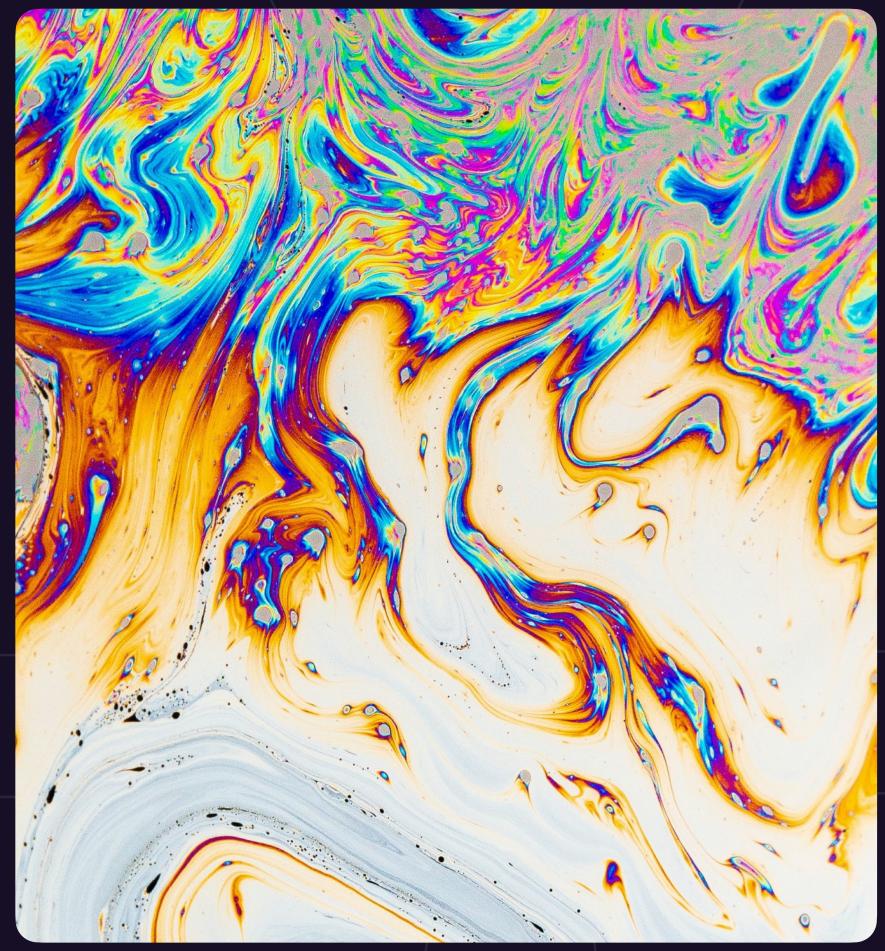




## nf-core tools

### Helper tools for users & developers

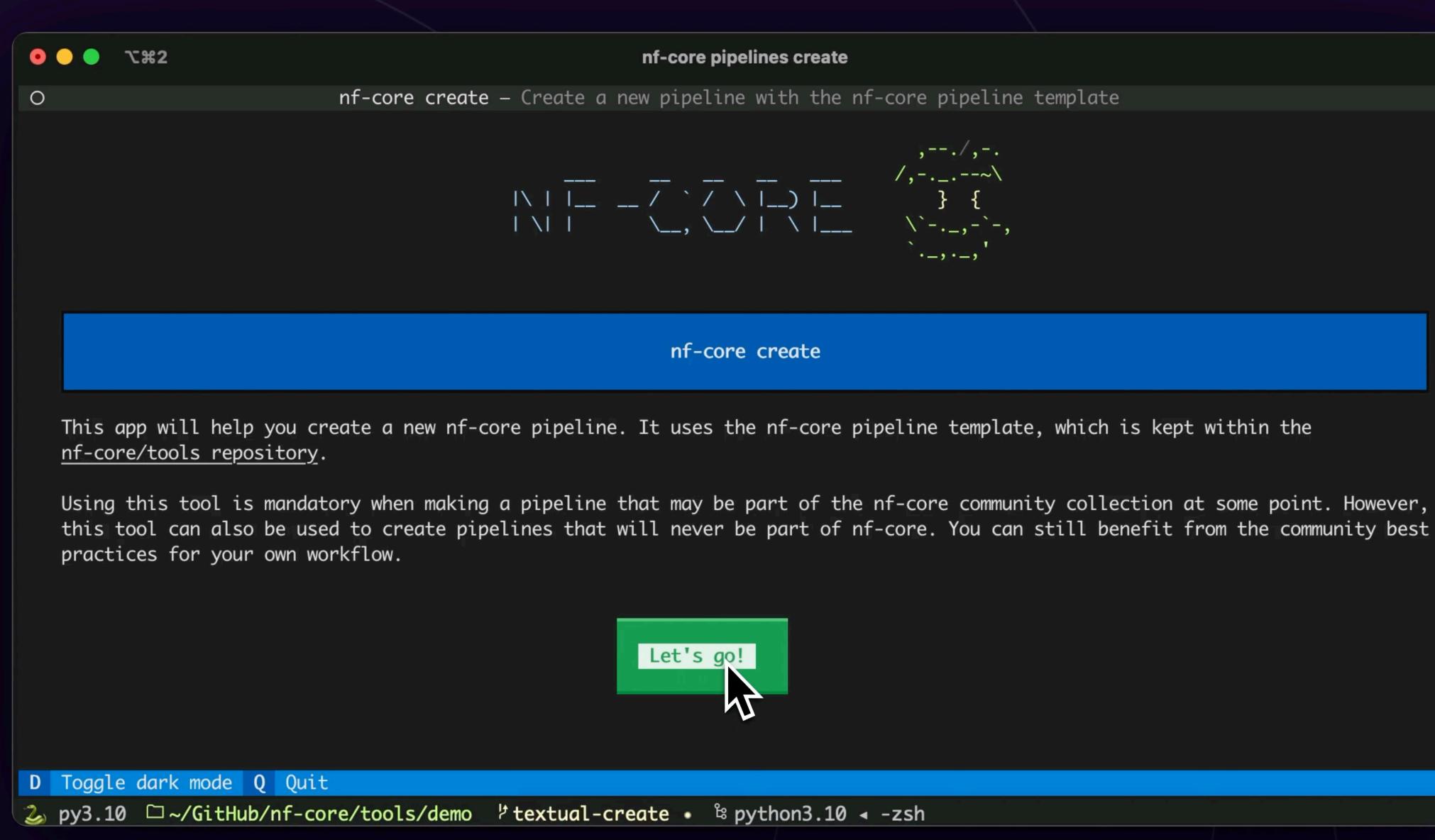
- Improved download capability
- More fine-grained control of pipeline creation from the nf-core template
- Rewritten launch and schema tooling
- User friendly terminal app, using Textual















# **Channels: The Nextflow Podcast**

## New podcast for developers!

- New episodes every second Monday ightarrow
- Technical deep dives with Nextflow developers
- Interviews with leaders in the field

- 24 episodes so far, each 30 mins 1 hour
- Join us on Spotify, Apple Music, YouTube, Twitter (X)

# CHANNELS the nextflow podcast



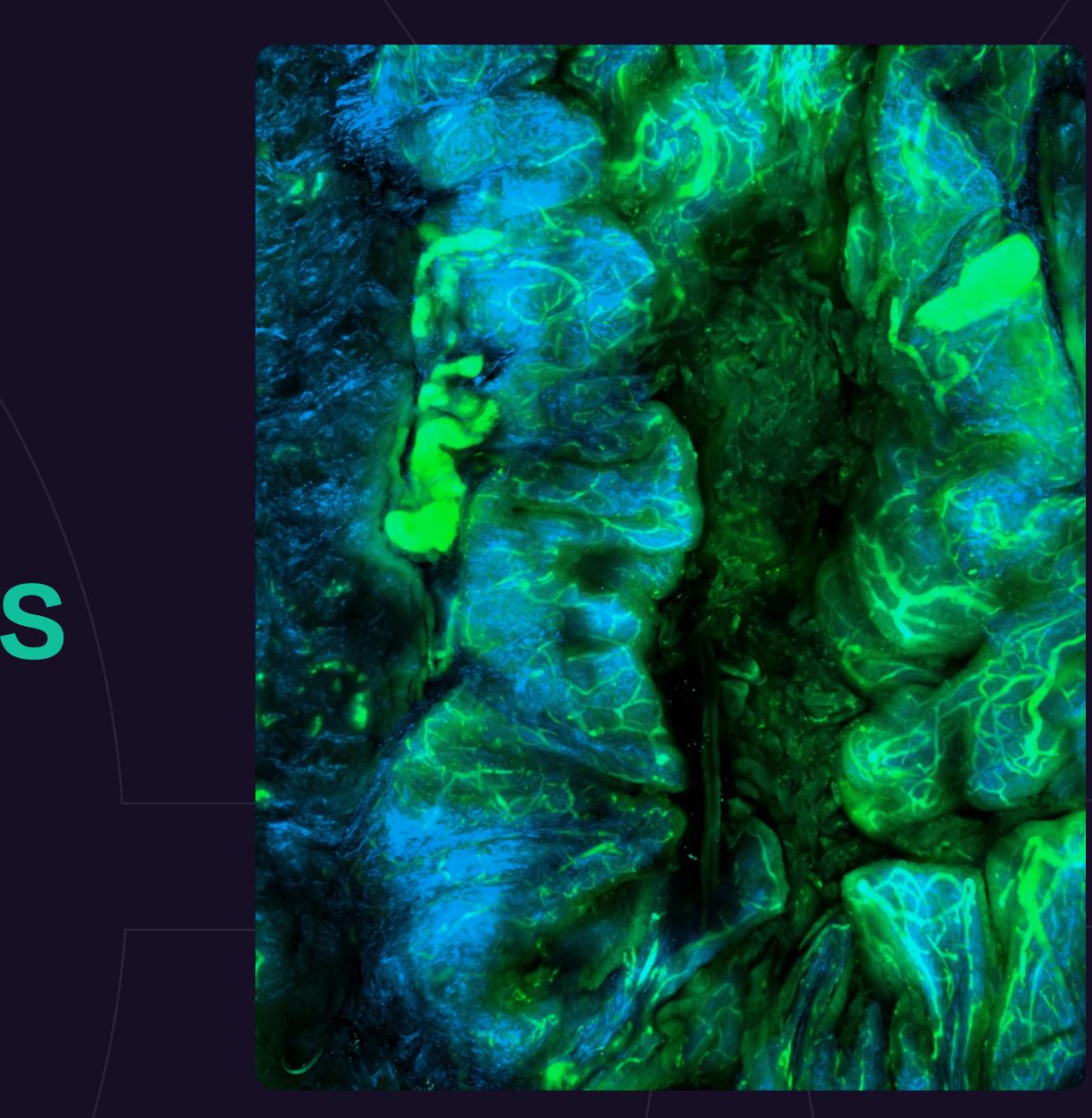




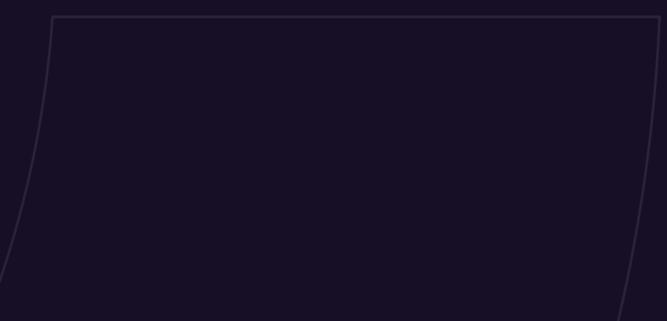


# Community announcements

Projects for the community that are launching today!



Announcing the launch of the Nextflow Ambassador Program - an initiative designed to foster collaboration, knowledge sharing, and community growth









What you get

Help to shape and grow the Nextflow and nf-core communities

Receive training and get access to our content library

Access a travel fund for conferences; get support for local events

Get recognition for your work, as well as exclusive swag!

What you do

How to apply



**Nextflow AMBASSADOR** 







What you get

Engage with the local, national, and international Nextflow community

Speak about Nextflow and nf-core at meetings and events

Running local events such as user groups, hackathons, and workshops

Writing or sharing tweets, blogs, articles, and technical docs

What you do

How to apply

Knextflow

**AMBASSADOR** 



















What you get

## nextflow.io/ambassadors

We're looking for people who:

- Joined the Nextflow and nf-core community at least 6-months ago
- Share our information reliably and appropriately
- Have already participated in some of our events and/or initiatives
- Are willing to actively support the community as an ambassador for at least one year

What you do

How to apply

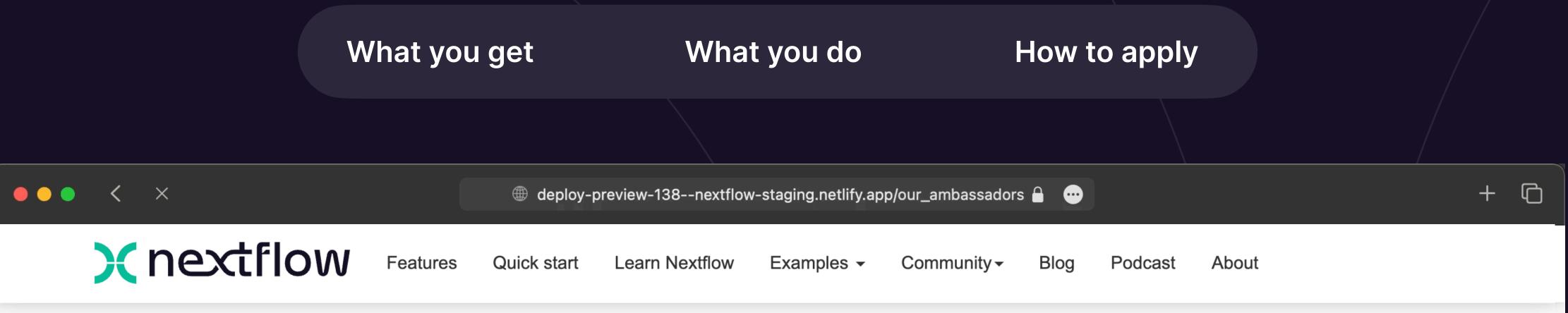












### **Become an ambassador!**

The Nextflow community is a dynamic ecosystem that brings together thousands of researchers, developers, and enthusiasts who are passionate about data-driven workflows and scientific computing. It thrives on the principles of open-source software, open science, and knowledge sharing. Here, you'll have the opportunity to connect with like-minded individuals from around the world, exchange ideas, and contribute to the advancement of cutting-edge bioinformatics, genomics, and data analysis pipelines. Whether you're a seasoned expert or just beginning your journey, the Nextflow community offers a supportive environment that

values your insights and encourages your growth.

Check our ambassadors here!

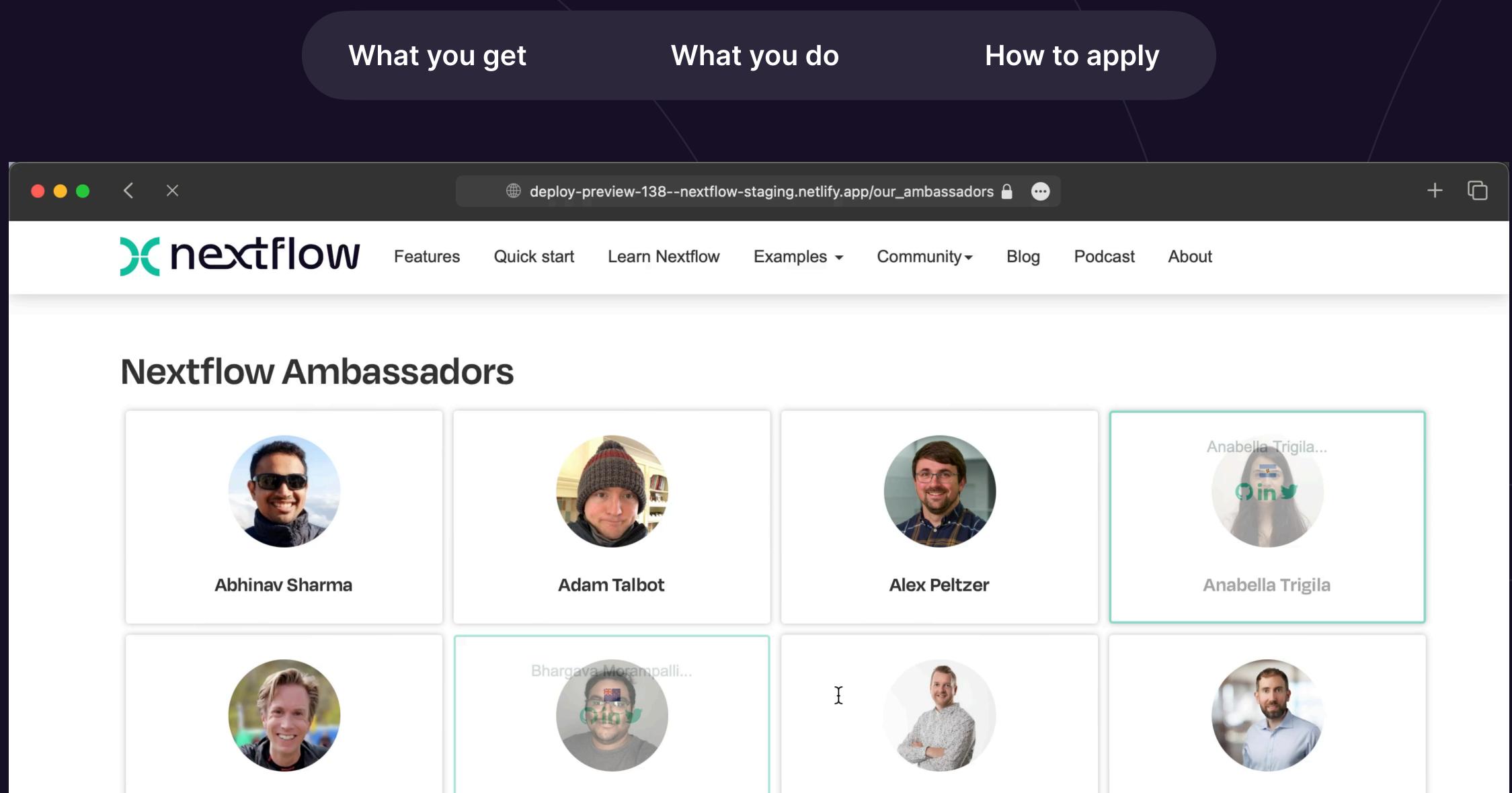
### Why become a Nextflow Ambassador?

The Nextflow ambassador program is a unique and exciting initiative designed to empower passionate individuals within the Nextflow community to play a more active role in fostering collaboration, knowledge sharing, and engagement. As a Nextflow Ambassador, you will have the opportunity to amplify the reach and impact of Nextflow by promoting its adoption, organizing community events, sharing your expertise through presentations and tutorials, and assisting fellow community members with their questions and challenges. This program is a way to recognise the dedicated volunteers that contribute their time, enthusiasm, and expertise to help grow and strengthen the Nextflow ecosystem. By becoming a Nextflow Ambassador, you'll not only enhance your own skills and network but also contribute to the advancement of scientific

# AMBASSADOR

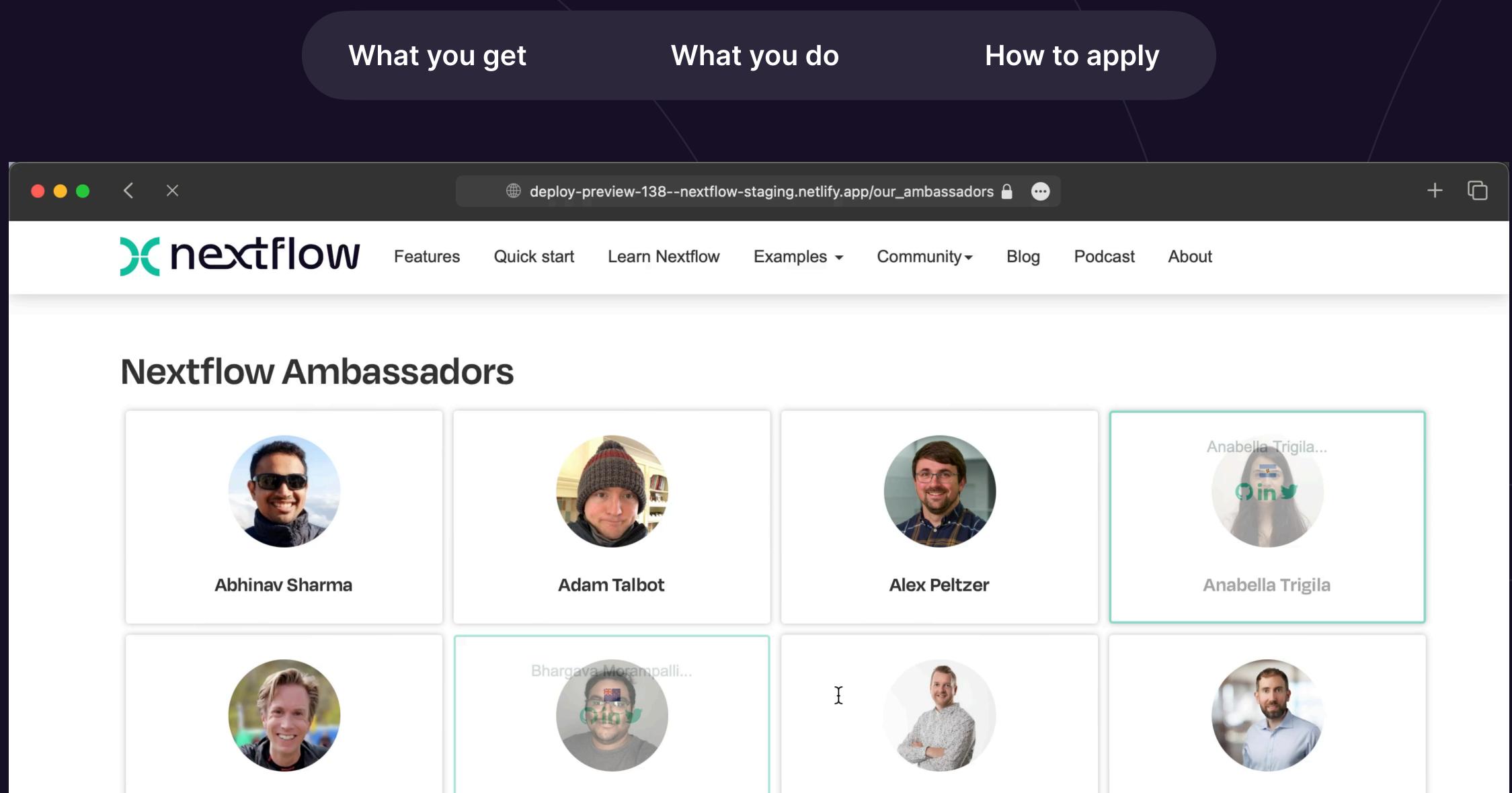
















What you get

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## nextflow.io/ambassadors

Read more in our blog post on <u>nextflow.io</u>!

What you do

How to apply

## Nextflow ambassador handbook

September 2023



# **Community Forum**

A new home for the community across all Segera tools, built with Discourse – brings public access, scales with the community and fosters better structured discussion









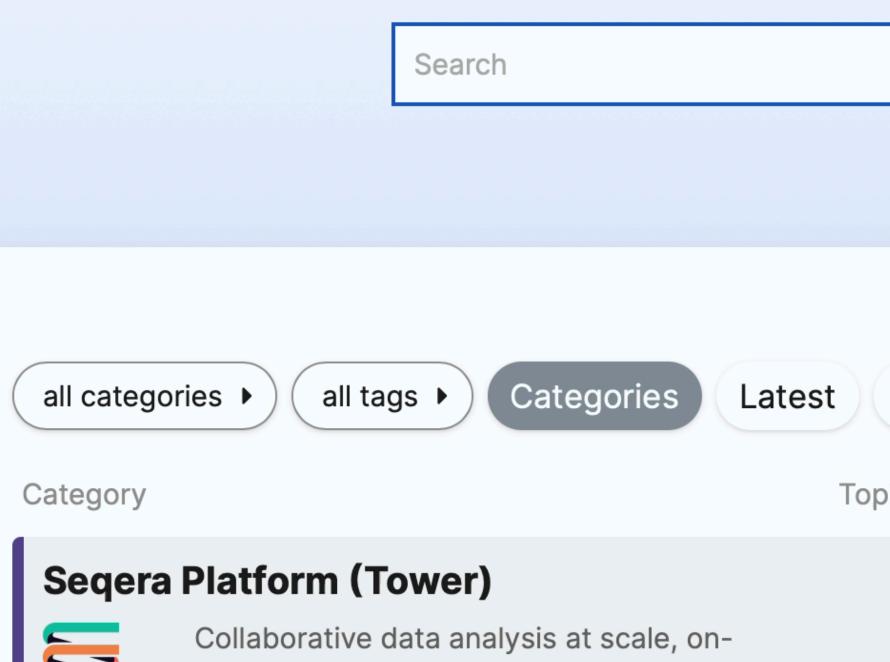








We're happy to have you here. If you need help, please search before you post.



premises or in any cloud.



🗮 community.seqera.io 🔒

•••

# Welcome to the community!

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ics	Latest			
0		Welcome to Seqera Community! Random	<b>1</b> 7 Aug	



Q

💄 Log In

Sign Up

# Community Forum

**X** nextflow

### Introducing community.seqera.io

Learn more

Read more in our blog post on <u>nextflow.io</u>!

# community.seqera.io >







## Geraldine Van de Auwera

### New Segera Lead Developer Advocate!

- Formerly worked at the Broad Institute with GATK, WDL, Terraform
- Wrote the O'Reilly book "Genomics in the Cloud"
- Lives in Boston, USA
- Phil Ewels will move to be the Seqera Product Manager for Open Source
  - Nextflow + MultiQC + Wave + Fusion\*













# Thank you



## Phil Ewels, PhD

Product Manager for Open Source phil.ewels@seqera.io

