



**17/20 JUNE**  
MILANO

## Program

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Data science  
is writing  
the future.  
Come  
and leave  
a mark on it.

# e-Rum 2020

Welcome to



The European R users meeting (eRum) is a biennial conference that brings the R User Community of Europe together to exchange experiences, broaden knowledge of R and collaborate.

eRum is an open event, and it welcomes expert and skillful practitioners as well as people who just want to take a peek on the future of data science. eRum aims to provide a platform for the creation of new collaborations and for sharing experiences. eRum is a no profit conference, and this year it will be a totally virtual event, with free access for everyone. Get ready for e-Rum 2020!

The e-Rum 2020 organizing and program committees

# Program Overview.



# Morning sessions

**17/06**

|       | Area  |                   |
|-------|---|-------------------|
| 08:30 | Yoga session                                  | Yoga session      |
| 08:40 |   |                   |
| 08:50 |   |                   |
| 09:00 | Reception & Welcome                           | Stage             |
| 09:10 |   |                   |
| 09:20 | Institutional Openings Talks                  |                   |
| 09:30 |   |                   |
| 09:40 | Invited Session 1                             |                   |
| 09:50 |   |                   |
| 10:00 |   |                   |
| 10:10 |   |                   |
| 10:20 |   |                   |
| 10:30 |   |                   |
| 10:40 |   |                   |
| 10:50 |   |                   |
| 11:00 | Q&A   | Personal sessions |
| 11:10 |   |                   |
| 11:20 |   |                   |
| 11:30 | Parallel Session 1<br><i>Machine Learning</i> |                   |
| 11:40 | Parallel Session 2<br><i>Life Sciences</i>    |                   |
| 11:50 |   |                   |
| 12:00 |   |                   |
| 12:10 |   |                   |
| 12:20 |   |                   |
| 12:30 |   |                   |
| 12:40 | Q&A   | Q&A               |
| 12:50 |   |                   |
| 13:00 |   |                   |

**18/06**

|       | Area  |  |
|-------|---|--|
| 08:30 | Yoga session                                    | Yoga session                                 |
| 08:40 |   |  |
| 08:50 |   |  |
| 09:00 | Reception & Welcome                             | Stage  |
| 09:10 |   |  |
| 09:20 |   |  |
| 09:30 |   |  |
| 09:40 | Parallel session 5<br><i>R World</i>            | Parallel session 6<br><i>R in Production</i> |
| 09:50 |   |  |
| 10:00 |   |  |
| 10:10 |   | Q&A  |
| 10:20 | Q&A   |  |
| 10:30 |   |  |
| 10:40 |   |  |
| 10:50 |   |  |
| 11:00 | Keynote 3: Francesco Bartolucci                 |  |
| 11:10 |   |  |
| 11:20 |   |  |
| 11:30 | Parallel Session 7<br><i>Data visualization</i> |  |
| 11:40 | Parallel Session 8<br><i>Machine Learning</i>   |  |
| 11:50 |   |  |
| 12:00 |   |  |
| 12:10 |   |  |
| 12:20 |   |  |
| 12:30 |   |  |
| 12:40 | Q&A   | Q&A  |
| 12:50 |   |  |
| 13:00 |   |  |

**19/06**

|       | Area   |   |
|-------|--|---|
| 08:30 | Yoga session   | Yoga sessions                                     |
| 08:40 |  |   |
| 08:50 |  |   |
| 09:00 | Reception & Welcome  | Stage Sessions                                    |
| 09:10 |  |   |
| 09:20 | <b>Lightning talks 1<br/><i>Data Visualization &amp; R in Production</i></b> | <b>Lightning talks 2<br/><i>Life Sciences</i></b> |
| 09:30 |  |   |
| 09:40 | Speakers Q&A   | Speakers Q&A                                      |
| 09:50 |  |   |
| 10:00 |  |   |
| 10:10 | <b>Lightning talks 3<br/><i>Machine Learning</i></b>                         | <b>Lightning talks 4<br/><i>Applications</i></b>  |
| 10:20 |  |   |
| 10:30 |  |   |
| 10:40 | Speakers Q&A   | Speakers Q&A                                      |
| 10:50 |  |   |
| 11:00 | Keynote 5: Tomas Kalibera  |   |
| 11:10 |  |   |
| 11:20 |  |   |
| 11:30 | Parallel session 9<br><i>R in Production</i>                                 |   |
| 11:40 | Parallel session 10<br><i>Machine Learning &amp; Applications</i>            |   |
| 11:50 |  |   |
| 12:00 |  |   |
| 12:10 |  |   |
| 12:20 |  |   |
| 12:30 |  |   |
| 12:40 | Q&A  | Q&A   |
| 12:50 |  |   |
| 13:00 |  |   |

\*Times are indicative. Check detailed information on further pages for exact timeslots of sessions. Please note that all times in this document are in CEST (Central European Summer Time)

# Afternoon sessions

**17/06**

|       | Area   | Stage   | 14:00 |
|-------|--|---|-------|
| 14:00 |  |   |       |
| 14:10 |  |   |       |
| 14:20 | <b>Keynote 1: Stephanie Hicks</b>                                      |   |       |
| 14:30 |  |   |       |
| 14:40 |  |   |       |
| 14:50 | Break: Meet the sponsors   |   |       |
| 15:00 |  |   |       |
| 15:10 |  |   |       |
| 15:20 | <b>Parallel Session 3</b><br><i>Applications &amp; R in Production</i> | <b>Parallel Session 4</b><br><i>Life Sciences</i> |       |
| 15:30 |  |   |       |
| 15:40 |  |   |       |
| 15:50 |  |   |       |
| 16:00 |  |   |       |
| 16:10 | Q&A  | Q&A   |       |
| 16:20 |  |   |       |
| 16:30 |  |   |       |
| 16:40 |  |   |       |
| 16:50 | <b>Keynote 2: Jared Lander</b>   |   |       |
| 17:00 |  |   |       |
| 17:10 |  |   |       |
| 17:20 | <b>Closing Remarks</b>   | Stage   |       |
| 17:30 |  |   |       |
| 17:40 | Yoga session   | Yoga Session                                      |       |
| 17:50 |  |   |       |

**18/06**

|       | Area  | Stage   | 14:00 |
|-------|---|---|-------|
| 14:00 |   |   |       |
| 14:10 |   |   |       |
| 14:20 |   |   |       |
| 14:30 | <b>Invited Session 2</b>  |   |       |
| 14:40 |   |   |       |
| 14:50 |   |   |       |
| 15:00 |   |   |       |
| 15:10 |   |   |       |
| 15:20 |   |   |       |
| 15:30 |   |   |       |
| 15:40 |   |   |       |
| 15:50 |   |   |       |
| 16:00 |   |   |       |
| 16:10 | Q&A   | Personal sessions   |       |
| 16:20 | <b>Shiny Demo 1</b><br><i>Machine Learning &amp; Applications</i> | <b>Shiny Demo 1</b><br><i>Mobility &amp; Spatial Data</i> |       |
| 16:30 |   |   |       |
| 16:40 |   |   |       |
| 16:50 |   |   |       |
| 17:00 |   |   |       |
| 17:10 |   |   |       |
| 17:20 |   |   |       |
| 17:30 |   |   |       |
| 17:40 |   |   |       |
| 17:50 |   |   |       |

|       | Area                           | Stage            | 14:00 |
|-------|--------------------------------|------------------|-------|
| 14:00 |                                |                  |       |
| 14:10 |                                |                  |       |
| 14:20 |                                |                  |       |
| 14:30 |                                |                  |       |
| 14:40 |                                |                  |       |
| 14:50 |                                |                  |       |
| 15:00 |                                |                  |       |
| 15:10 |                                |                  |       |
| 15:20 |                                |                  |       |
| 15:30 |                                |                  |       |
| 15:40 |                                |                  |       |
| 15:50 |                                |                  |       |
| 16:00 |                                |                  |       |
| 16:10 | Q&A                            | Poster session 1 |       |
| 16:20 | What If?<br>From eRum to e-Rum | Poster session 2 |       |
| 16:30 |                                |                  |       |
| 16:40 |                                |                  |       |
| 16:50 |                                |                  |       |
| 17:00 |                                |                  |       |
| 17:10 |                                |                  |       |
| 17:20 |                                |                  |       |
| 17:30 |                                |                  |       |
| 17:40 |                                |                  |       |
| 17:50 |                                |                  |       |

**19/06**

|       | Area | Stage             | 14:00 |
|-------|------|-------------------|-------|
| 14:00 |      |                   |       |
| 14:10 |      |                   |       |
| 14:20 |      |                   |       |
| 14:30 |      |                   |       |
| 14:40 |      |                   |       |
| 14:50 |      |                   |       |
| 15:00 |      |                   |       |
| 15:10 |      |                   |       |
| 15:20 |      |                   |       |
| 15:30 |      |                   |       |
| 15:40 |      |                   |       |
| 15:50 |      |                   |       |
| 16:00 |      |                   |       |
| 16:10 | Q&A  | Personal sessions |       |
| 16:20 | Q&A  | Sessions          |       |
| 16:30 |      |                   |       |
| 16:40 |      |                   |       |
| 16:50 |      |                   |       |
| 17:00 |      |                   |       |
| 17:10 |      |                   |       |
| 17:20 |      |                   |       |
| 17:30 |      |                   |       |
| 17:40 |      |                   |       |
| 17:50 |      |                   |       |

\*Times are indicative. Check detailed information on further pages for exact timeslots of sessions. Please note that all times in this document are in CEST (Central European Summer Time)

A photograph looking up at a massive, intricate glass and steel dome. The dome is composed of numerous panels of blue-tinted glass, held together by a complex network of black steel beams forming concentric circles. At the very top center is a circular opening. The surrounding architecture includes gold-colored structural elements and some paintings on the walls.

Keynotes and  
invited speakers.

# Keynotes

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**Stephanie  
Hicks**

17/06 – 14:00



**Jared  
Lander**

17/06 – 16:30



**Francesco  
Bartolucci**

18/06 – 10:40



**Sharon  
Machlis**

18/06 – 16:40



**Tomas  
Kalibera**

19/06 – 11:00



**Kelly  
O'Briant**

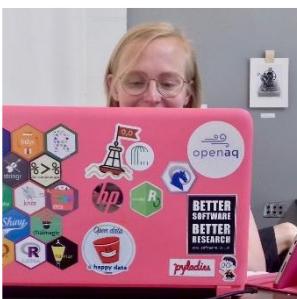
19/06 – 16:30

# Invited Speakers

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Ioannis  
Kosmidis



Maëlle  
Salmon



Dean  
Attali



Colin  
Fay



Romain  
François



Robin  
Lovelace



Colin  
Gillespie



Simon  
Anders



Edwin  
Thoen



Britta  
Velten



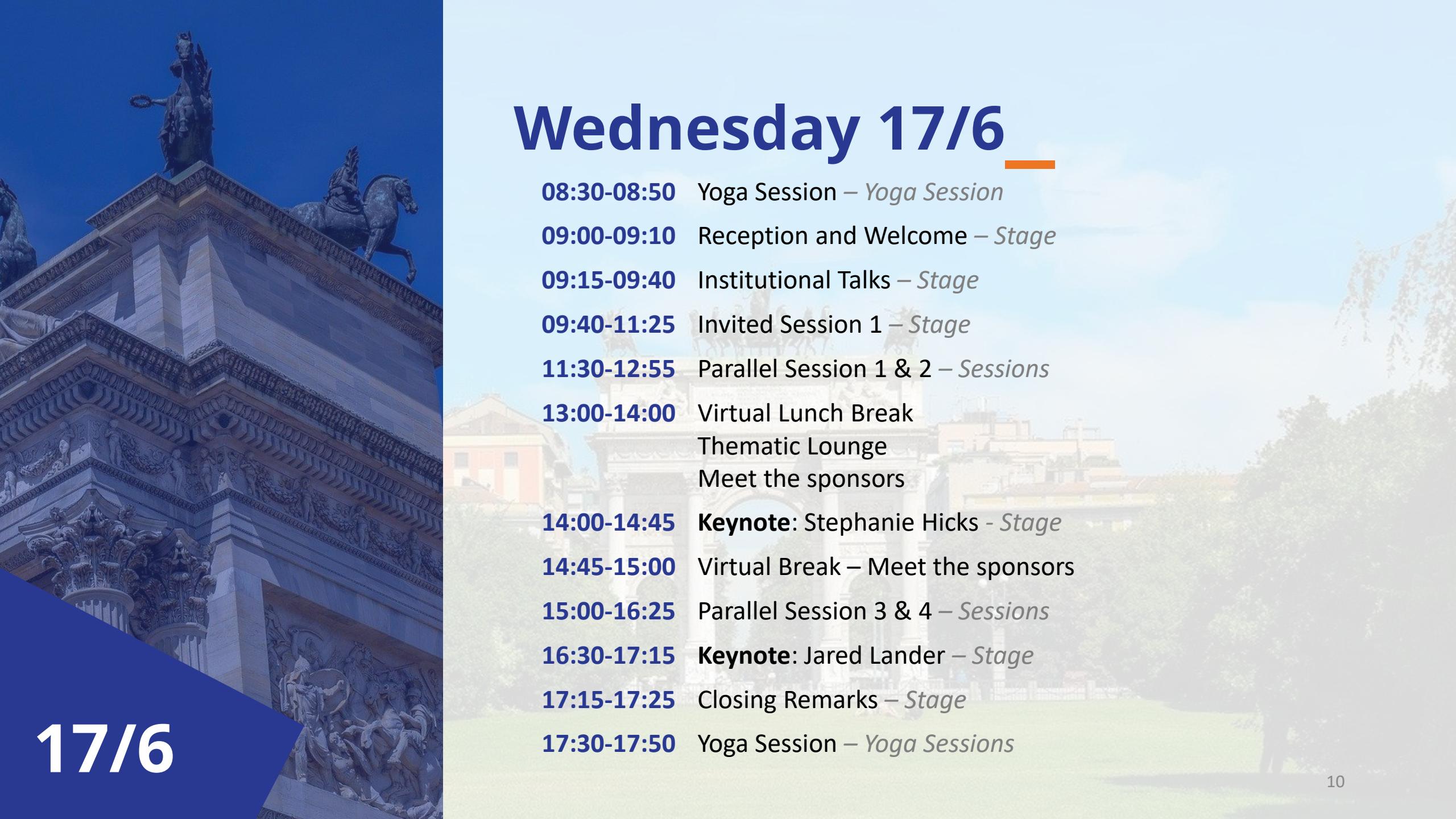
Emanuele  
Guidotti



Mark  
Hanly

Detailed program.





17/6

# Wednesday 17/6

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- 08:30-08:50** Yoga Session – *Yoga Session*
- 09:00-09:10** Reception and Welcome – *Stage*
- 09:15-09:40** Institutional Talks – *Stage*
- 09:40-11:25** Invited Session 1 – *Stage*
- 11:30-12:55** Parallel Session 1 & 2 – *Sessions*
- 13:00-14:00** Virtual Lunch Break  
Thematic Lounge  
Meet the sponsors
- 14:00-14:45** **Keynote:** Stephanie Hicks - *Stage*
- 14:45-15:00** Virtual Break – Meet the sponsors
- 15:00-16:25** Parallel Session 3 & 4 – *Sessions*
- 16:30-17:15** **Keynote:** Jared Lander – *Stage*
- 17:15-17:25** Closing Remarks – *Stage*
- 17:30-17:50** Yoga Session – *Yoga Sessions*

## Invited Speakers

### Session 1

| 9:40  | Stage                    |  |
|-------|--------------------------|--|
| 9:45  | <b>Britta Velten</b>     | Multi-Omics Factor Analysis Plus: A probabilistic framework for comprehensive and scalable integration of multi-modal data |
| 10:00 | <b>Emanuele Guidotti</b> | COVID-19 Data Hub<br><span>#covidR winner</span>   |
| 10:15 | <b>Mark Hanly</b>        | COVOID: Modelling COVID-19 Transmission and Interventions<br><span>#covidR winner</span>                                   |
| 10:30 | <b>Simon Anders</b>      | <i>To be confirmed</i>   |
| 10:45 | <b>Edwin Thoen</b>       | Building Agile data products leveraging the R package structure  |
| 11:05 | <b>Personal Sessions</b> | <b>Q&amp;A</b>   |

## Parallel Session 1

### Machine Learning

|       |                  |  |
|-------|------------------|--|
| 11:30 | Session 1        |  |
| 11:35 | Daniel Meister   | Deduplicating real estate ads using Naive Bayes record linkage                       |
| 11:50 | Emanuele Cordano | Hydrological Modelling and R   |
| 12:05 | Stefano Renzetti | gWQS: An R Package for Linear and Generalized Weighted Quantile Sum (WQS) Regression |
| 12:20 | Øystein Sørensen | Flexible Meta-Analysis of Generalized Additive Models with metagam                   |
| 12:40 | Session 1        | Q&A  |

## Parallel Session 2

### Life Sciences

|  | 11:30 | Session 2                  |   |
|--|-------|----------------------------|---|
|  | 11:35 | <b>Simone Pernice</b>      | CONNECTOR: a computational approach to study intratumor heterogeneity             |
|  | 11:50 | <b>Paolo Castagno</b>      | EPIMOD: A computational framework for studying epidemiological systems            |
|  | 12:05 | <b>Mieke Deschepper</b>    | How to apply R in a hospital environment on standard available hospital-wide data |
|  | 12:20 | <b>Nicolò Margaritella</b> | APFr: Average Power Function and Bayes FDR for Robust Brain Networks Construction |
|  | 12:40 | Session 2                  | Q&A   |

# Keynote: Stephanie Hicks



14:00 - Stage

Stephanie Hicks is an Assistant Professor in the Department of Biostatistics at Johns Hopkins Bloomberg School of Public Health. She is also a faculty member of the Johns Hopkins Data Science Lab, co-host of The Corresponding Author podcast discussing data science in academia, and co-founder of R-Ladies Baltimore. Her research interests are at the intersection of statistics, genomics, and data science. She actively contributes software packages to Bioconductor and is involved in teaching courses for data science and the analysis of genomics data.

## Parallel Session 3

### Applications & R in Production

17/6

|       |                  |  |
|-------|------------------|--|
| 15:00 | Session 3        |  |
| 15:05 | Leen Jooken      | Using process mining principles to extract a collaboration graph from a version control system log |
| 15:20 | Alex Gold        | Design Patterns For Big Shiny Apps   |
| 15:35 | Ayomide Shodipo  | Fake News: AI on the battle ground   |
| 15:50 | Henrik Bengtsson | progressr: An Inclusive, Unifying API for Progress Updates   |
| 16:10 | Session 3        | Q&A  |

## Parallel Session 4

### Life Sciences

|  | 15:00 | Session 4                 |   |
|--|-------|---------------------------|---|
|  | 15:05 | <b>Moritz Hess</b>        | Interpretable and accessible Deep Learning for omics data with R and friends          |
|  | 15:20 | <b>Federico Marini</b>    | GeneTonic: enjoy RNA-seq data analysis, responsibly                                   |
|  | 15:35 | <b>Mattia Chiesa</b>      | DaMiRseq 2.0: from high dimensional data to cost-effective reliable prediction models |
|  | 15:50 | <b>Francesca Giorgolo</b> | A simple and flexible inactivity/sleep detection R package                            |
|  | 16:10 | Session 4 Q&A             |   |

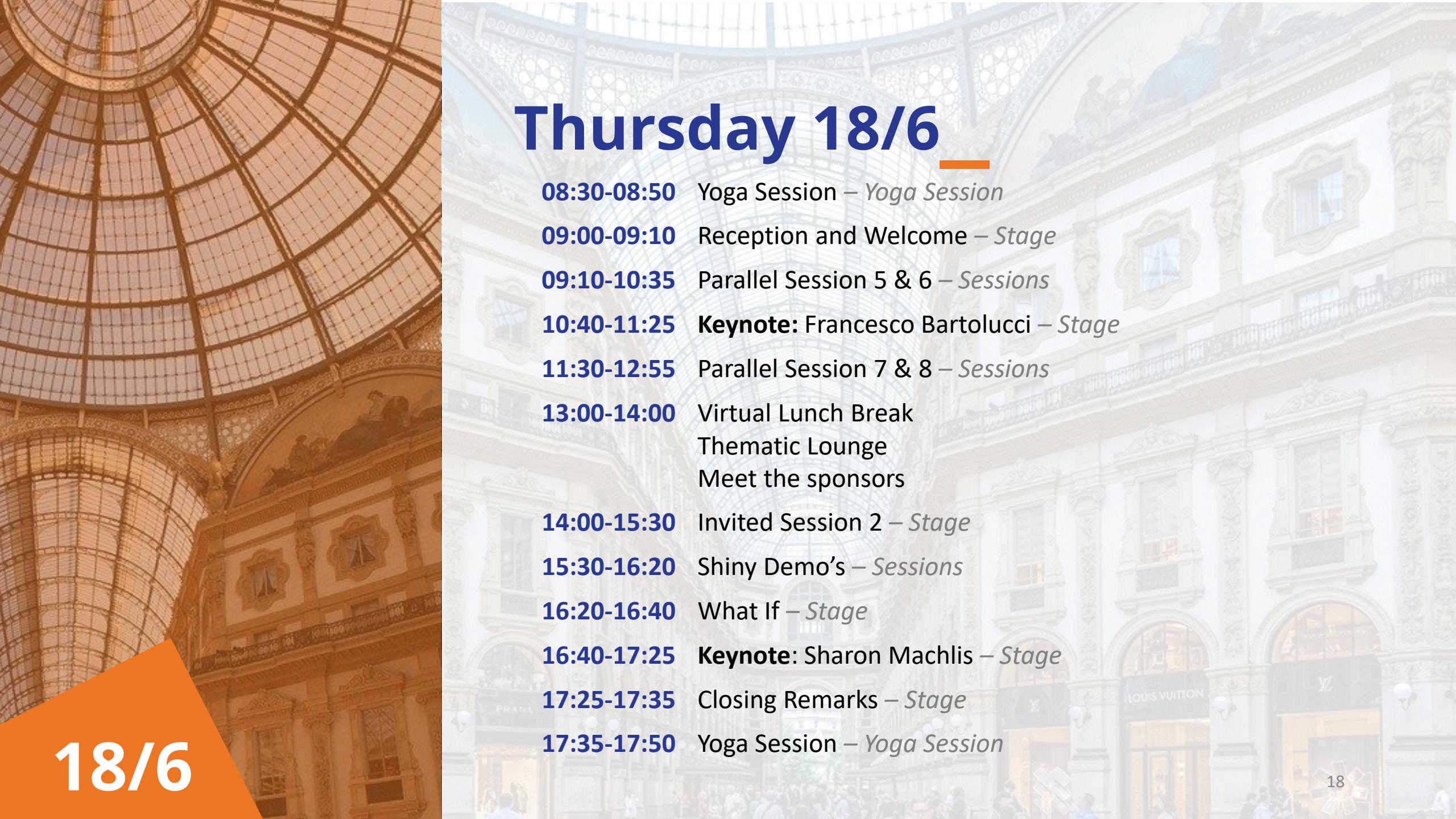
# Keynote: Jared Lander

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16:30 - Stage

Jared Lander is Chief Data Scientist at Lander Analytics, and Adjunct Professor at Columbia Business School, where he teaches the Introduction to Programming in R course. He is organizer of the New York Open Statistical Programming Meetup and Series Editor for Pearson. He is author of the R packages `coefplot`, `useful`, `resumer` and `RepoGenerator`, as well as the book “R for Everyone: Advanced Analytics and Graphics”. His work with the Minnesota Vikings in the 2015 NFL Draft has been featured in the Wall Street Journal.



# Thursday 18/6

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- 08:30-08:50** Yoga Session – *Yoga Session*
- 09:00-09:10** Reception and Welcome – *Stage*
- 09:10-10:35** Parallel Session 5 & 6 – *Sessions*
- 10:40-11:25** **Keynote:** Francesco Bartolucci – *Stage*
- 11:30-12:55** Parallel Session 7 & 8 – *Sessions*
- 13:00-14:00** Virtual Lunch Break  
Thematic Lounge  
Meet the sponsors
- 14:00-15:30** Invited Session 2 – *Stage*
- 15:30-16:20** Shiny Demo's – *Sessions*
- 16:20-16:40** What If – *Stage*
- 16:40-17:25** **Keynote:** Sharon Machlis – *Stage*
- 17:25-17:35** Closing Remarks – *Stage*
- 17:35-17:50** Yoga Session – *Yoga Session*

## Parallel Session 5

### R World

|       |                          |  |
|-------|--------------------------|--|
| 9:10  | Session 5                |  |
| 9:15  | <b>Joseph Rickert</b>    | The R Consortium 2020: adapting to rapid change and global crisis              |
| 9:30  | <b>Regina Siegers</b>    | CorrelAidX - Building R-focused Communities for Social Good on the Local Level |
| 9:45  | <b>Christoph Sax</b>     | From consulting to open-source and back  |
| 10:00 | <b>Dmytro Perepolkin</b> | {polite}: web etiquette for R users  |
| 10:20 | Session 5                | Q&A  |

## R in Production & R World

### Parallel Session 6

|       |                     |  |
|-------|---------------------|--|
| 9:10  | Session 6           |  |
| 9:15  | Layik Hama          | Powering Turing e-Atlas with R   |
| 9:30  | Massimiliano Silano | Dplyr snowflake integration for cloud based massive and fast data manipulation |
| 9:45  | Sarah Gibson        | Supporting R in the Binder Community   |
| 10:05 | Session 6 Q&A       |  |

# Keynote: Francesco Bartolucci



10:40 - Stage

Francesco Bartolucci is a Professor of Statistics in the Department of Economics of the University of Perugia, where he also coordinated the Doctorate program in "Mathematical and Statistical Methods for the Economic and Social Sciences". The main research interests of Francesco are focused on: Longitudinal and panel data, Latent variable and mixture models, Marginal models for categorical data, Optimization and Markov chain Monte Carlo algorithms. He co-authored the R packages LMest, MultiCIRT, MLCIRTwithin, cquad and extRC.

## Parallel Session 7

### Data Visualization

|       |                         |   |
|-------|-------------------------|---|
| 11:30 | Session 7               |   |
| 11:35 | Tatjana Kekojevic       | Transparent Journalism Through the Power of R |
| 11:50 | Mustapha Larbaoui       | Elevating shiny module with {tidymodules}     |
| 12:05 | Renate Delucchi Danhier | Interactive visualization of complex texts    |
| 12:20 | Tobias Verbeke          | What's New in ShinyProxy                      |
| 12:40 | Session 7 Q&A           |   |

## Parallel Session 8

### Machine Learning

|       |                   |  |
|-------|-------------------|--|
| 11:30 | Session 8         |  |
| 11:35 | Luís G. Silva     | Voronoi Linkage for Spatially Misaligned Data  |
| 11:50 | Andrea Sottosanti | Astronomical source detection and background separation: a Bayesian nonparametric approach |
| 12:05 | Apostolos Chalkis | High dimensional sampling and volume computation   |
| 12:25 | Session 8 Q&A     |  |

## Invited speakers Session 2

| 14:00 | Stage                    |  |
|-------|--------------------------|--|
| 14:05 | <b>Ioannis Kosmidis</b>  | brquasi: Improved quasi-likelihood estimation  |
| 14:20 | <b>Szilard Pafka</b>     | Better than Deep Learning: Gradient Boosting Machines (GBM) – with 2020 updates                    |
| 14:35 | <b>Colin Fay</b>         | Testing Shiny: What, why, and how.   |
| 14:50 | <b>Robin Lovelace</b>    | From writing code to infoRming policy: a case study of reproducible research in transport planning |
| 15:10 | <b>Personal Sessions</b> | <b>Q&amp;A</b>   |

# Shiny Demo's

15:30-16:05 Presentations

16:05-16:20 Q&A in personal sessions

## Shiny Session 1

**Mintu Nath** A demonstration of ABACUS: Apps Based Activities for Communicating and Understanding Statistics

**Emanuele Fabbiani** tsviz: a data-scientist-friendly addin for RStudio

**Andrea Melloncelli** Media Shiny: Marketing Mix Models Builder

**Ottavia M. Epifania** Scoring the Implicit Association Test has never been easier: DscoreApp

**Riccardo Porreca** rTRhexNG: Hexagon sticker app for rTRNG

**Antoine Logean** How green is your portfolio ? Tracking C02 footprint in the insurance sector

## Shiny Session 2

**Agostino Torti** Visualising and Modelling Bike Sharing Mobility usage in the city of Milan

**Angel Udiás** ESPRES: A shiny web tool to support River Basin Management planning in European Watersheds

**Josue Aduna** Mobility scan

**Lorenzo Busetto** Developing Shiny applications to facilitate precision agriculture workflows

**Luigi Ranghetti** "GUIinterp": a Shiny GUI to support spatial interpolation

# Keynote: Sharon Machlis



16:40 - Stage

Sharon Machlis is Director of Editorial Data & Analytics at IDG Communications, a global technology media company that publishes Computerworld, CIO, PCWorld, and Macworld, among other brands. In her current role, she hosts InfoWorld's "Do More With R" video series, writes R how-to articles, helps colleagues with data journalism projects, codes tools for colleagues around the world, and analyzes editorial web metrics. Sharon is the author of "Practical R for Mass Communication & Journalism" and the Computerworld Beginner's Guide to R. She has also written a number of R packages, among which SunsetTSA.

A photograph of the Sagrada Família cathedral in Barcelona, showing its intricate Gothic architecture with multiple spires and colorful ceramic tiles.

# Friday 19/6

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- 08:30-08:50** Yoga Session – *Yoga Session*
- 09:00-09:10** Reception and Welcome – *Stage*
- 09:10-10:05** Lightning Talks 1 & 1 – *Sessions*
- 10:05-11:00** Lightning Talks 3 & 4 – *Sessions*
- 11:00-11:45** **Keynote:** Tomas Kalibera – *Stage*
- 11:45-13:10** Parallel Session 5 & 6 – *Sessions*
- 13:10-14:00** Virtual Lunch Break  
Thematic Lounge  
Meet the sponsors
- 14:00-15:30** Invited Session 3 – *Stage*
- 15:30-16:20** Poster Session – *Sessions*
- 16:30-17:15** **Keynote:** Kelly O'Briant – *Stage*
- 17:15-17:35** Closing Party – *Stage*
- 17:40-18:00** Yoga Session – *Yoga Session*

# Lightning Talks

9:10- 9:50 Presentations

9:50-10:05 Q&A

## Lightning Talks 1

**Steffen Moritz** Time Series Missing Data Visualizations

**Thierry Onkelinx** effectclass: an R package to interpret effects and visualise uncertainty

**Gabriele Galatolo** Supporting Twitter analytics application with graph-databases and the aRangodb package

**Kirill Muller** dm: working with relational data models in R

**Matilde Grecchi** An innovative way to support your sales force

**Nicholas Jhirad** Keeping on top of R in Real-Time, High-Stakes trading systems

## Lightning Talks 2

**Andrea Cappozzo** An enriched disease risk assessment model based on historical blood donors records

**Marco Calderisi** A principal component analysis based method to detect biomarker caption from vibrational spectra

**Mirko Signorelli** ptmixed: an R package for flexible modelling of longitudinal overdispersed count data

**Dario Righelli** Differential Enriched Scan 2 (DEScan2): an R pipeline for epigenomic analysis

**Ger Inberg** Reproducible Data Visualization with CanvasXpress

**Liam Brierley** Using open-access data to derive genome composition of emerging viruses

# Lightning Talks

10:05-10:45 Presentations

10:45-11:00 Q&A

## Lightning Talks 3

**Florian Privé** Ultra fast penalized regressions with R package {bigstatsr}

**Krystian Igras** Explaining black-box models with xspliner to make deliberate business decisions

**Mustafa Cavus** One-way non-normal ANOVA in reliability analysis using with doex

**Øystein Sørensen** Analyzing Preference Data with the BayesMallows Package

**Sami Diaf** Predicting Business Cycle Fluctuations Using Text Analytics

**Stefan Lenz** Flexible deep learning via the JuliaConnectoR

## Lightning Talks 4

**Berry Boessenkool** rdwd: R interface to German Weather Service data

**Christoph Sax** tv: Show Data Frames in the Browser

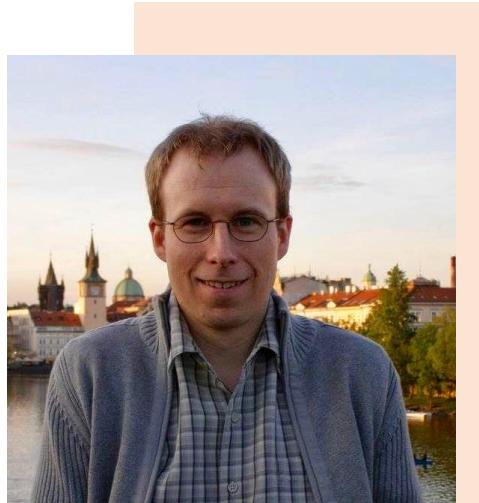
**Claus Ekstrom** Predicting the Euro 2020 results using tournament rank probabilities scores from the socceR package

**Indranil Ghosh** Design your own quantum simulator with R

**Keshav Bhatt** What are the potato eaters eating

**Niels Martin** Towards more structured data quality assessment in the process mining field: the DaQAPO package

# Keynote: Tomas Kalibera



11:00 - Stage

Tomas Kalibera is researcher at the Czech Technical University. As an active R Core developer Tomas has been contributing improvements and bug fixes to multiple parts of the R runtime including the bytecode compiler and interpreter, source reference handling, Windows specific code, package installation, memory management, object dispatch and function invocation. He implemented and maintains rchk, a tool for finding PROTECT bugs, which he uses regularly to check CRAN packages. He has been helping the CRAN team with checking and debugging packages, and is a member of the R Foundation.

## Parallel Session 9

### R in Production

|       |   |   |
|-------|---|---|
| 11:45 | Session 9                                   |   |
| 11:50 | <b>Marcin Dubel</b>                         | Be proud of your code! Tools and patterns for making production-ready, clean R code |
| 12:05 | <b>Matthias Bannert</b>                     | R alongside Airflow, Docker and Gitlab CI   |
| 12:20 | <b>André Rivenæs &amp; Markus Mortensen</b> | Using XGBoost, Plumber and Docker in production to power a new banking product      |
| 12:35 | <b>Andrie De Vries</b>                      | Creating drag-and-drop shiny applications using sortable                            |
| 12:55 | Session 9 Q&A                               |   |

## Parallel Session 10

### Machine Learning & Applications

|       |                                   |   |
|-------|-----------------------------------|---|
| 11:45 | Session 10                        |   |
| 11:50 | Jędrzej Świeżewski                | FastAI in R: preserving wildlife with computer vision               |
| 12:05 | Luca Torriani &<br>Ilaria Sartori | Manifoldgstat: an R package for spatial statistics of manifold data |
| 12:20 | Jakob Dambon                      | varycoef: Modeling Spatially Varying Coefficients                   |
| 12:35 | Mikkel Meyer<br>Andersen          | Computer Algebra Systems in R                                       |
| 12:55 | Session 10                        | Q&A   |

## Invited Speakers Session 3

| 14:00 | Stage                    |   |
|-------|--------------------------|---|
| 14:05 | <b>Dean Attali</b>       | CRANalerts: A Shinyapp-as-a-Service for Impatient R Users |
| 14:20 | <b>Colin Gillespie</b>   | And you though CRAN was harsh                             |
| 14:35 | <b>Maëlle Salmon</b>     | How to improve your R package?                            |
| 14:50 | <b>Romain François</b>   | dplyr 1.0.0   |
| 15:10 | <b>Personal Sessions</b> | Q&A   |

# Poster Session

15:30-15:50 Presentations

15:50-16:20 Q&A in personal sessions

## Poster Session 1

**Alessio Crippa** A flexible dashboard for monitoring platform trials

**Angela Andreella** PRDA package: Enhancing Statistical Inference via Prospective and Retrospective Design Analysis

**Dario Righelli** EasyReporting: a Bioconductor package for Reproducible Research implementation

**Federico Agostinis** NewWave: a scalable R package for the dimensionality reduction of single-cell RNA-seq

**Patricia Ryser-Welch** Integrating professional software engineering practices in medical research software

**Tobias Schieferdecker** Dealing with changing administrative boundaries: The case of Swiss municipalities

## Poster Session 2

**Binod Jung Bogati** Automate flexdashboard with GitHub

**Gabriel Okasa** orf: Ordered Random Forests

**Marco Calderisi** Power Supply health status monitoring dashboard

**Natalja Maksimova** First-year ICT students dropout predicting with R models

**Olalekan Joseph Akintande** Benchmark Percentage Disjoint Data Splitting in Cross Validation for Assessing the Skill of Machine

**Yann Desjeux** badDEA: An R package for measuring firms' efficiency adjusted by undesirable outputs

**Aurélien Severino** CorpFinder- a new application to identify Large Corporate Risks

# Keynote: Kelly O'Briant



16:30 - Stage

Kelly O'Briant is a Solutions Engineer at RStudio interested in configuration and workflow management with a passion for R administration. She has a background in data science, software engineering and cloud computing, with degrees in bioinformatics and computational sciences. In 2016, Kelly founded the Washington DC chapter of R-Ladies, a global organization dedicated to increasing gender diversity in the R community.



20/6

# Saturday 20/6

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- 09:00-09:20** Yoga session
- 09:30-12:30** Morning Workshops
- 12:30-14:00** Virtual Lunch Break
- 14:00-17:00** Afternoon Workshops
- 17:10-17:30** Yoga session

# Workshops

---

9:30-12:30 Morning sessions

## Morning

**Lubomír Štěpánek**  
Jiří Novák

Image processing and computer vision with R

**Przemysław Biecek**  
Hubert Baniecki

Explanation and exploration of machine learning models  
with R

**Patricia Ryser-Welch**  
Paul Burton  
Demetris Avraam  
Stuart Wheater  
Olly Butters  
Becca Wilson

Non-disclosive federated analysis in R

**Cristina Muschitiello**  
Niccolò Stamboglis

A unified approach for writing automatic reports:  
parameterization and generalization of R-Markdown

**Andrea Melloncelli**

Is R ready for Production? Let's develop a Professional Shiny Application!

# Workshops

---

14:00-17:00 Afternoon sessions

20/6

## Afternoon

**Tatjana Kecojevic**  
Katarina Kosmina  
Tijana Blagojev

Build a website with blogdown in R

**Christine Choirat**  
The Renku Development Team

Reproducible workflows with the RENKU platform

**Riccardo Porreca**  
Peter Schmid

Bring your R Application Safely to Production. Collaborate, Deploy, Automate.

**Jean-Philippe Coene** How to build htmlwidgets

**Goran Milovanović** Semantic Web in R for Data Scientists

**David Granjon**  
Mustapha Larbaoui  
Xiao Ni, Bo wang  
Ardalan Mirshani  
Douglas Robinson

Advanced User Interfaces for Shiny Developers

# Yoga sessions

Tired of sitting endlessly behind your desk? Start and end each day of e-Rum with a virtual Yoga session!

**17/06**      **08:30-08:50** Let the joints breathe

**17:30-17:50** Release the tension of your back

**18/06**      **08:30-08:50** Elongate your spine

**17:40-18:00** Mini-sequence for your back

**19/06**      **08:30-08:50** Breathe and move

**17:40-18:00** Twists after the desk

**20/06**      **09:00-09:20** Sun Salutation for all – How to start the day right

**17:10-17:30** Stretch-strengthen-connect – Feel & enjoy your body

## About the instructor

Paola Panella is a certified international yoga teacher. After living in Dublin for 6 years, where she embraced her studies of the thousand-year old discipline of Yoga and Ayurvedic medicine, she had continued her formation and practice with various master teachers in a number of teacher trainings and workshops held all over the world. In Italy, she currently manages two yoga studios in Turin and organizes yoga retreats and trips in Italy and in Bali.



### Website

<http://www.madreindia.it/>

### Instagram

@madre\_india

### Facebook

@madre.india

# Meet the team behind e-Rum.



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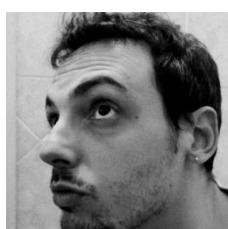
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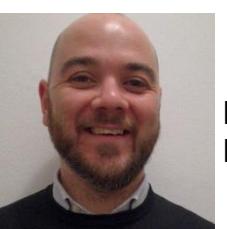
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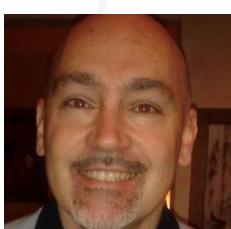
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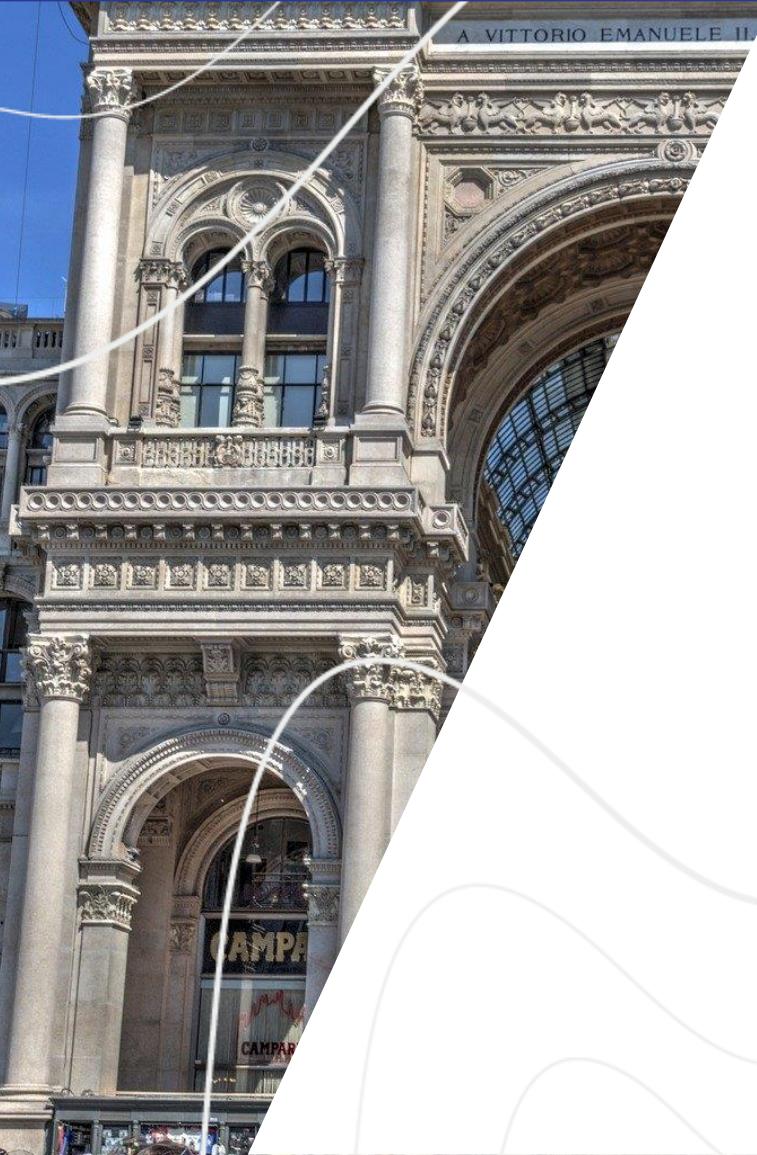
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