

EPFL

*ANNUAL
REPORT
2019*

College of Humanities

EPFL

*ANNUAL
REPORT
2019*

College of Humanities

<i>DEAN'S FOREWORD</i>	<i>5</i>
<i>PRESENTING THE CDH</i>	<i>6</i>
<i>EDUCATION</i>	<i>12</i>
<i>RESEARCH</i>	<i>28</i>
<i>PUBLIC ENGAGEMENT</i>	<i>46</i>
<i>FINANCES AND PERSONNEL</i>	<i>62</i>
<i>PARTNERSHIPS AND COLLABORATIONS</i>	<i>68</i>

The Swiss Federal Institute of Technology in Lausanne (EPFL)

EPFL is located in Lausanne, Switzerland, on the shores of Lake Geneva and at the foot of the Alps. Its main campus serves as the workplace for more than 15,000 people, including 11,000 students. Established in 1853 under the name Ecole spéciale de Lausanne, it was rebranded as the Ecole Polytechnique Fédérale de Lausanne in 1969. In welcoming students, professors, and collaborators from nearly 120 different countries, EPFL is among the most cosmopolitan of European engineering schools. With both a Swiss and an international focus, three missions drive EPFL today: education, research, and innovation. EPFL is composed of five schools and two colleges.

DEAN'S FOREWORD



It is with great pleasure that I present to you the inaugural annual report of the College of Humanities (CDH) at EPFL. Having started my position as Dean in 2018, I am excited by the excellence and diversity of the teaching and research at CDH. Today, we are confronted with major challenges that can be understood and addressed only by bringing together the best ideas from all scientific disciplines.

In 2019 we offered more than 140 courses on a wide variety of topics in the humanities and social sciences. Through the study of history, law, psychology, economics, design, international studies, and anthropology, students at EPFL have learned how societies work, what responsibilities they have as scientists, and how to become more creative within their own disciplines. In 2019 we also introduced new courses that tackled such crucial issues as sustainability and the relationship between ethics and technology.

Two thousand nineteen was also a great year for research. In February, the Laboratory for the History of Science and Technology was inaugurated by a newly arrived faculty member, Prof. Jérôme Baudry. Later in the year, we congratulated the first graduates of our Master in Digital Humanities and the Doctoral School. We also welcomed our first Artist-in-Residence and organized a string of

cultural events throughout the campus, including concerts, dance performances, and roundtable discussions. At ArtLab we hosted two exceptional exhibitions to celebrate the 50th year anniversary of EPFL and, in collaboration with RTS (Radio Télévision Suisse), organized a series of radio panel shows on the digital turn and how it affects our daily lives.

As CDH continues to grow, we seek to increase the interaction of the human sciences with engineering, architecture, life sciences, basic sciences, and computer sciences, thereby contributing to the culture of excellence at EPFL.

I hope you will find this report stimulating.
Yours,

Béla Kapossy

PRESENTING THE CDH

EPFL's College of Humanities (CDH) is a nexus for human and social sciences at the heart of an engineering school. Its mission is to promote and develop collaborations amongst the human and social sciences, engineering sciences, natural sciences, and other fields cultivated at EPFL through three main pillars of education, research, and public engagement.

The humanities and social sciences are fundamental to the education and development of engineers. Study in these disciplines sensitizes students and scientists to today's pressing societal challenges, and adds leadership capacity to their scientific thinking.

The CDH has 74 employees, seven faculty members, 130 teachers, and 146 courses on a wide range of themes, two research institutes (Digital Humanities and Area and Global Studies), one art exhibition center (ArtLab), and one unit dedicated to promoting art and culture on campus. The CDH's mission in education, research, and public engagement promotes a poly-perspective vision based on four axes: interdisciplinarity, global awareness, citizenship, and creativity.



COLLEGE OF HUMANITIES DIRECTION

KAPOSSY BÉLA

Professor and CDH dean

Aghroum Nicole

Financial and administrative manager

Cornut Jasmina

Scientific assistant

Coscia Claire-Lise

Administrative assistant

Dahmouni Martin Néjia

SHS program coordinator

Dungy Madeleine

Scientist

Farget Christine

Administrative assistant,
Global Issues program

Faucherand Gilles

Computer scientist

Krichane Selim

Scientist, Gamelab co-founder,
and pedagogical design coordinator

Lovis Béatrice

Scientific assistant

Luterbacher Celia

Journalist

Martin Nunez Virginie

Communication manager

Mauron Layaz Véronique

Scientist and CDH-Culture manager

Moretti Franco

Professor

Rochat Yannick

Scientist and Gamelab co-founder

Tejada Gabriela

Academic deputy

Tormey Roland

Scientist, pedagogical research

INSTITUTE OF AREA AND GLOBAL STUDIES

KAPOSSY BÉLA

Professor and IAGS director

Aeberli Marius

Coordinator of the DRIL,
FIELD, and INSSINC programs

Bianchi Irene

Scientific assistant,
Lausanne Time Machine

Bolli Monique

Doctoral assistant

Bordone Lucia

Doctoral assistant

Di Lenardo Isabella

Scientist and Lausanne
Time Machine coordinator

Gonçalves Martin Johanna

Scientist and LIFE program coordinator

Graezer Bideau Florence

Senior scientist and member
of the EDAR Commission

Hoesli Eric

Professor and coordinator
of the Russia program

Hügli Isabelle

IAGS administrative assistant

Laperrouza Marc

Scientist and coordinator
of the DRIL, CHIC,
and INSSINC programs

Nault Charmilie

Scientific assistant,
STAS Russia program

Pollet Ludovic

Scientific assistant,
Lausanne Time Machine

Puissant Pierre-Xavier

Scientific assistant, DRIL

Tschui Raffael

Scientific assistant, CHIC,
and STAS China programs

DIGITAL HUMANITIES INSTITUTE

SÜSSTRUNK SABINE

Professor and DHI director

Boullier Dominique

Senior scientist

Collins Kathleen

Deputy of section

Gatica-Perez Daniel

Professor and section director

Impett Leonardo

Doctoral assistant

Pidoux Jessica

Doctoral assistant

Salzmann Mathieu

Scientist

Vassalli Jocelyne

Administrative assistant

ARTLAB

KENDERDINE SARAH

Professor and ArtLab director

Bini Giulia

Assistant curator
and production coordinator

Chouard Patrick

Audiovisual technician

Curty Joël

Communication manager

Lardeau Johnston Anne-Gaëlle

Manager

Nicolaz Aurélie

Administrative assistant

Quidort Mélissa

Intern

Romon Stéphanie

Administrative assistant

DIGITAL AND COGNITIVE MUSICOLOGY LABORATORY

ROHRMEIER MARTIN

Professor and DCML director

Cecchetti Gabriele

Doctoral assistant

Deguernel Ken

Postdoctoral researcher

Ericson Petter

Postdoctoral researcher

Finkensiep Christoph

Doctoral assistant

Harasim Daniel

Doctoral assistant

Hentschel Johannes

Doctoral assistant

Herff Steffen

Postdoctoral researcher

Lieck Robert

Postdoctoral researcher

Moss Fabian

Doctoral assistant

Neuwirth Markus

Scientist

Quinton Estelle

Administrative assistant

EXPERIMENTAL MUSEOLOGY LABORATORY

KENDERDINE SARAH

Professor and eM+ director

Al-Badri Nora

Artist-in-residence

Cantelli Lorenzo

Software engineer

Donaldson Patrick

Media designer

Heuer Afshan

Postdoctoral researcher

Romon Stéphanie

Administrative assistant

Yacob Mary

Scientific assistant

LABORATORY FOR THE HISTORY OF SCIENCE AND TECHNOLOGY

BAUDRY JÉRÔME

Professor and LHST director

Chachereau Nicolas

Postdoctoral researcher

Dumas Primbault Simon

Postdoctoral researcher

Fenzi Marianna

Postdoctoral researcher

Guffroy Yohann

Doctoral assistant

Mihailescu Ion-Gabriel

Postdoctoral researcher

Raffestin Pauline

Administrative assistant

Volynskaya Alina

Scientific assistant

DIGITAL HUMANITIES LABORATORY

KAPLAN FRÉDÉRIC

Professor and DHLAB director

Ares Oliveira Sofia

Systems engineer

Barman Raphaël

Doctoral assistant

Baumer Kevin

Programmer

Descombes Albane

Digital humanities engineer

Ehrmann Maud

Scientist

Foucart-Noriega Alicia

Administrative assistant

Hamel Nils

Physicist

Pardini Federica

Doctoral assistant

Romanello Matteo

Scientist

Edu- cation

THE SHS TEACHING PROGRAM

Introductory cycle: Global Issues
Bachelor cycle
Master cycle and SHS Prize

STAS MINOR

CHIC program
Fieldwork in Russia

FIELDWORK IN COLOMBIA AND INDIA

LIFE program
INSSINC program

INTERDISCIPLINARY PRACTICES

DRIL fund
MAKE fund
SKIL laboratory
DLL laboratories
The Fête des Vignerons
Collaboration with Politecnico di Torino

MASTER IN DIGITAL HUMANITIES

First graduates
Internship programs

DOCTORAL PROGRAM IN DIGITAL HUMANITIES

CDH EDUCATION IN NUMBERS

One important mission of the CDH is to develop and manage the Social and Human Sciences (SHS) teaching program, which offers an array of courses on a wide range of themes to all EPFL bachelor and master students.

Through the Minor in Science, Technology, and Area Studies (STAS) and other innovative programs, students expand their knowledge of diverse geopolitical, socioeconomic, and cultural contexts and participate in field activities in groundbreaking settings all over the world. These programs follow a twofold interdisciplinary approach, bringing together students of EPFL faculties while also integrating the various disciplines of partner institutions.

The CDH also offers the Master of Science in Digital Humanities, providing students with the opportunity to learn how to translate data from global cultural heritage, historical archives, and social media into a deeper knowledge of the contemporary world.

THE SHS TEACHING PROGRAM

The Social and Human Sciences (SHS) teaching program is an integral part of EPFL study plans, from the introductory cycle to the first year of the master's degree. In 2019, the program offered 146 courses given by 130 teachers, most of whom come from the University of Lausanne (UNIL), but also from EPFL or other collaborating institutions such as the University of Art and Design Lausanne (ECAL) and the Geneva School of Art and Design (HEAD).



← Best poster award ceremony for the "Global Issues" program
Photo: Maxime Marendaz

Introductory cycle: Global Issues

In order to tackle the complex global issues of the current moment, future scientists and engineers should understand as early as possible the interactions between social challenges and technical solutions.

During the spring semester, every first-year EPFL student participates in the Global Issues course, organized around six themes taken from the United Nations development agenda within an interdisciplinary perspective, including: health, climate, food, energy, communication, and mobility. In teams, students then create a poster on a subject of their choice.

In a ceremony held on March 5, 2019 at the SwissTech Convention Center, twelve of the best student posters of 2018 received awards. Four of them were selected for a special prize.

The laureates

- To Beef or Not to Beef - In-vitro Meat Culture: A Sustainable Alternative to Intensive Livestock Farming?
- Oxalogenic Trees: A Solution for CO₂ Storage
- Opioid Crisis: Prescription Addiction? The Example of the United States
- 5G: Issues and Controversies

Professor Muhammad Yunus, Nobel Peace Prize laureate of 2006, gave a keynote address encouraging reflection on the potential of technology and innovation to maximize social impact in resolving the most urgent global challenges.

Bachelor cycle

Every semester, students have to choose a course from the SHS study plan. These courses have no prerequisites. The projects that students carried out as part of their courses in 2019 illustrate the richness and diversity of the program.

Second-year bachelor SHS program: Artistic Practices A
Teachers: Frank Westermeyer and Aurélie Pétrel, HEAD
Photo: Group 1



Photograph by artist Tomás Saraceno: natural spider webs from his exhibition, "On Air," at the Palais de Tokyo in Paris in 2018. This image sparks a debate on the constructions of nature for students in the SHS master course, "Nature Images." The aim of this course is to explore nature as a shared object of the sciences and political discourses; as a source of creation (architecture, visual arts, literature); and as a subject of society (anthropology, philosophy, ecology).

Master cycle

In the first year of their master's program, the students follow an SHS course organized into two consecutive semesters. The first semester is an introduction to the course, while the second semester focuses on an individual or group project. The diversity of the projects highlights how the meeting of social sciences and humanities has awoken curiosity in future engineers and researchers.

SHS Prize

At the end of each academic year, lecturers can select one or more projects for a prize based on overall quality, originality, or audacity. The SHS Prize is then awarded to these selected projects on the eve of the Graduation Day ceremony, La Magistrale, which concludes the student's education.

The grantees of the 2019 SHS Prize were master's students Simon Bérard, Marie Majeux, and Sophie Paladini, who received the award for their exceptional study on the media's perception of the Chinese presence in Africa. The students carried out the project as part of the course, "China: the rebirth of a great power," led by Antoine Kernen. The trio received the honor from CDH Dean Prof. Béla Kapossy at a ceremony at the Rolex Learning Center on October 4, 2019.



CDH Dean Béla Kapossy, Simon Bérard, Marie Majeux, and Sophie Paladini
Photo: Alain Herzog



STAS MINOR

At the crossroads between science, technology, and social sciences, the Minor in Science, Technology and Area Studies (STAS) provides students with tools and skills to communicate across disciplines and regions. It combines courses and training modules to prepare for fieldwork in China or Russia. Lecturers Marc Laperrouza and Eric Hoesli have overseen several projects.



The 2019 edition of the China Hardware Innovation Camp (CHIC) www.chi.camp



CHIC program

In the China Hardware Innovation Camp (CHIC) program, interdisciplinary groups of students design a product from scratch and travel to southern China to finalize it in a local prototyping factory (Seedstudio).

The fifth edition of CHIC that took place in July 2019 attracted a record-breaking number of 47 participants split into eight teams, four of which were composed of EPFL master's students. After months of preparation, they concluded the camp with a two-week trip to Shenzhen and Hong Kong, where they completed their prototypes.

Fieldwork in Russia

In Russia, students learn about the challenges posed by climate change with a fieldwork project taking place either on a research vessel (Arctic Floating University) or in a field camp in the Tundra (Yamal). In both cases, students have the opportunity to work with local research centers, universities, and industries.

Comprising groups with students of various engineering sections of EPFL and students in design, business, and social sciences from ECAL, UNIL, UNIGE, and other universities ensures a twofold interdisciplinarity.

During the summer, 23 Swiss students met with Russian counterparts in the Arctic in order to explore the impact of climate change from the angle of biodiversity, cryogenic processes, pollution, legal frameworks, and socioeconomic challenges.

Ten EPFL and UNIGE students embarked on the polar ship Professor Molchanov, navigating between the islands and archipelagos of the Arctic waters, from Svalbard to Nova Zembla. Students of the Arkhangelsk University (NArFU) and Russian researchers joined them.

Ten students from EPFL, UNIL, and UNIGE travelled to the Yamal peninsula to explore the vestiges of a gulag on the Dead Road and study its environment.

Three EPFL students stayed in the Samoylov Research Center in the Lena River Delta in eastern Siberia to study the effects of climate change.



On board the polar ship Professor Molchanov in the Arctic Ocean
Photo: Uni Arctic



In the Yamal province in the middle of the tundra exploring a gulag
Photo: Uni Arctic

FIELDWORK IN COLOMBIA AND INDIA

LIFE program (Leticia Immersive Fieldwork Experience Laboratory)

Supervisor: Johanna Gonçalves Martin

During the summer, seven students of engineering and social sciences and humanities of EPFL, UNIL, and UNIGE spent 21 days in the city of Leticia, located on the shores of Amazonia in southern Colombia, to conduct anthropology research. This immersive experience of practices and methods of anthropology marked the culmination of their spring 2019 semester project.

The projects dealt with

- The development of an app to teach the indigenous language, Tikuna, to local kids.
- The creation of an epidemiological model of diseases transmitted through water.



←
Yasmine Benkirane (HEC Lausanne, UNIL)
and Andres Engels (EPFL)
interview Keerthi C N (SELCO)
Photo: Marius Aeberli



→
The LIFE group in Leticia, Colombia
Photo: Johanna Gonçalves Martin

INSSINC program (India Switzerland Social Innovation Camp)

Supervisors: Marc Laperrouza and Marius Aeberli

Partnership with SELCO Foundation, swissnex India, EPFL Vice-Presidency for Innovation (VPI), and Canton de Vaud.

As part of this pilot program, 12 students from EPFL, EPFL+ECAL Lab, ECAL, and the University of Lausanne (UNIL) spent ten days developing innovative solutions to daily problems faced by the inhabitants of Bangalore, one of the fastest-growing Indian cities.

The participants hailed from such diverse disciplines as engineering, design, social sciences, and business, and worked in groups to develop and test four sustainable prototype solutions, meant to resolve housing and energy problems in Bangalore.

In truly interdisciplinary fashion, students collaborated to further their understanding of human-centered design and productive failure.

INTERDISCIPLINARY PRACTICES

The CDH actively contributes to the development of innovative pedagogies via interdisciplinary initiatives taking place on the campus and beyond.

DRIL fund

The Digital Resources for Instruction and Learning (DRIL) fund, set up by the Vice-Presidency for Education (VPE), aims to support the development of an online conversation tool for students to use during different phases of open-ended projects. When faced with open-ended problems, students often struggle with bridging the tasks at hand with their competencies. The DRIL project aims to address this issue by developing a companion to help students ask the right set of questions as they move through their projects.

MAKE fund

The MAKE fund, set up by the VPE, provides EPFL students with an opportunity to tackle interdisciplinary challenges during their training, thereby giving them a head start in developing the skills they will need in their professional future. It aims to facilitate group prototyping of a connected device involving students from across EPFL sections before and after going to China as part of the CHIC program, and to reinforce transversal abilities such as project management and reporting.

SKIL laboratory

The CDH is taking part in the Student Kreativity and Innovation Laboratory (SKIL) initiative set up by the EPFL's School of Architecture, Civil and Environmental Engineering (ENAC) through a number of aspects:

- Delivery of SHS courses in the SKIL building
- Collaboration with different initiatives (e.g. Act for Change Lab)
- Development of innovative teaching and learning formats

DLL laboratories

The CDH is part of a reflection group set up by the Discovery Learning Laboratories (DLL). This group focuses on the relevance and practice of interdisciplinary projects at EPFL. As such, it contributes to the development of project-based learning actions that go beyond traditional disciplinary boundaries.

→
EPFL students imagine the 2039 edition
of the famous Fête des Vignerons
Photo: Celia Luterbacher

The Fête des Vignerons

During the April interdisciplinary teaching week, co-directed by Florence Graezer Bideau, EPFL students in architecture, civil engineering, and environmental engineering jointly created seven projects linked to the future editions of the Wine Festival by integrating the cultural heritage of Lavaux, a nearby site registered on the UNESCO World Heritage list since 2007. Five professors from different fields discussed their ideas with them.

Collaboration with Politecnico di Torino

As a participant at the Architecture of the City Construction Bachelor program of the Politecnico di Torino, the CDH contributes to strengthening humanities and social sciences teaching within an architectural education program.



MASTER IN DIGITAL HUMANITIES

EPFL is one of the rare schools in the world to offer a Master of Science in Digital Humanities.

This program teaches how to interpret and translate data from cultural heritage, historical archives, and social media to share a better understanding of the world. Through access to a wide range of specialized subjects, students undertake projects in musicology, social media, literature, arts, user experience, history, and more. All of these subjects are available to them in the various labs of the Digital Humanities Institute (DHI).

First graduates

In 2019, the College of Humanities awarded the very first degrees in the Master of Science in Digital Humanities.

Internship programs

The Master in Digital Humanities is composed of three parts: a theoretical section with courses in computer science, and the humanities and social sciences; a six-month internship in a company or institution of the student's choice; and the writing of a Master's thesis.

Examples of institutions hosting students in 2019

- Institut national d'histoire de l'art (National Institute for Art History), Paris
- CERN - European Organization for Nuclear Research, Geneva
- Visium Technologies SA, start-up company
- DataGalaxy, data science company, Lyon
- Harvard Library, Cambridge
- The International Federation of the Red Cross and Red Crescent Societies (IFRC), Geneva
- Agence Mediafaune, digital communication agency
- Fondazione Giorgio Cini (Giorgio Cini Foundation), Venice
- BnF - Bibliothèque Nationale de France (National Library of France), Paris



The 2019 graduation: Mathieu Clavel, Raphaël Barman, Albane Descombes, Hakim Invernizzi, and Maryam Zakani
Photo: Jamani Caillet

DOCTORAL PROGRAM IN DIGITAL HUMANITIES

The Doctoral Program in Digital Humanities (EDDH) is educating a new generation of scientists who will be able to analyze, model, and critically reflect on real-world challenges by linking domain knowledge with quantitative methods. The PhD program is directed at computer and data scientists, engineers, mathematicians, and life scientists as well as broadly skilled students from the humanities and social sciences, all of whom are interested in the range of interdisciplinary research questions covered by the overarching digital humanities framework.

The program encourages close collaboration between students, researchers, and professors in digital humanities. The doctoral students here are trained to provide intellectual contributions and leadership in digital humanities as well as to social and cultural issues at large.

Admission to the program is on a competitive basis. In 2019, the EDDH observed a rising trend in application numbers and their quality, with a total of 57 candidates from top international universities.

CDH EDUCATION IN NUMBERS

146

*courses
SHS program*

130

*lecturers
SHS program*

7

*involved EPFL
schools*

STUDENTS

Bachelor SHS

Spring 2019 - 1 st year Introduction	1,313
Spring 2019 - 2 nd and 3 rd years	2,039
Autumn 2019 - 2 nd and 3 rd years	2,003

Master SHS

Spring 2019	1,242
Autumn 2019	1,303

STAS MINOR

Cycle 2018 - 2019 (Fieldwork 2019)

CHIC - China	47
Russia	23

Cycle 2019 - 2020

CHIC - China	20
Russia	19

Fieldwork in Colombia and India

LIFE - Colombia	7
INSSINC - India	12

Master in Digital Humanities

10

Doctoral students

Doctoral Program in Digital Humanities (EDDH)	8
Doctoral Program Architecture and Sciences of the City (EDAR)	4



Re- search

TWO INSTITUTES

Institute for Area and Global Studies (IAGS)
Digital Humanities Institute (DHI)

IAGS RESEARCH

Makerspaces
Memory and the City
Lausanne Time Machine

THE DHI LABORATORIES

Digital Humanities Laboratory
Digital and Cognitive Musicology Laboratory
Laboratory for Experimental Museology
Laboratory for the History of Science and Technology
Social Computing Group

PHD THESES

The first thesis of the EDDH
Ongoing theses

FURTHER RESEARCH

Studying engineering education
UNIL GameLab

CROSS PROGRAM

2019 Theme: Resistance
Selected projects

PROMOTIONS AND APPOINTMENTS

GRANTS AND RESEARCH PROJECTS IN 2019

PUBLICATIONS

The CDH is home to world-class interdisciplinary research conducted throughout its two institutes: the Institute for Area and Global Studies (IAGS) and the Digital Humanities Institute (DHI).

Research conducted at the IAGS examines local realities across diverse geopolitical contexts within the fields of urban anthropology, cultural heritage, historical archives, urban culture and innovation, climate change, engineering education, and more. The DHI fosters state-of-the-art research in digital humanities by applying methodologies from data science, computer science, and engineering to the study of humanities and social sciences.

The range of topics addressed by PhD students in their theses reflects the diversity of research possibilities in pioneering disciplinary areas offered by the CDH.

The CDH also coordinates the Collaborative Research on Science and Society (CROSS) program, which brings together researchers from EPFL and the University of Lausanne (UNIL) to jointly address current issues of society and technology.

TWO INSTITUTES

The 2018 ArtLab exhibition Kung Fu Motion
Photo: Alain Herzog



Institute for Area and Global Studies (IAGS)

The IAGS prepares students for professional activities in developing and emerging countries by providing them with tools to better understand non-Western societies and cultures.

The IAGS team concentrates its research in global geopolitical contexts with a special focus on Russian, Chinese, and Latin American studies. In both its educational programs – notably semester projects and the Minor in Science, Technology, and Area Studies (STAS) – and its research activities, the Institute oversees an interdisciplinary network of academic institutions, international organizations, and private companies.



The Russian oceanographic research vessel, "Professor Molchanov"
Photo: Eric Hoesli



Digital Humanities Institute (DHI)

The mission of the Digital Humanities Institute (DHI) is to provide international leadership in digital humanities research and education. It fosters research in the field of digital humanities using methodologies from data science, computer science, and engineering applied to humanities and social science fields – from music to cultural heritage.

The digital humanities program is an excellent example of EPFL's interdisciplinary approach, which goes beyond traditional disciplinary boundaries while strengthening the school's contribution to engineering and social sciences.

The DHI was launched in 2015 and already houses some of the most prestigious laboratories in Europe in this exciting and rapidly growing field.

IAGS RESEARCH

Makerspaces

"Politics and Communities of Innovation in Contemporary China" was a four-year Swiss National Science Foundation (SNS-F)-supported research project led by researchers Florence Graezer Bideau and Marc Laperrouza that concluded in 2019. The project was built around ethnographies of three makerspaces in Beijing, Shanghai, and Shenzhen, and their respective annual maker-fairs. Through fieldwork in these unique and autonomous urban spaces, researchers analyzed their structure and function in terms of social relationships, business models, and economic and political contexts. The book *Realtime: Making Digital China*, launched in Shenzhen in January 2020, is a significant output of this project.

Memory and the City: Assessing Tools for Interdisciplinary Research and Teaching

This project evaluates and experiments with research tools for studying the relationship between collective memory, urban space, and design in contemporary cities. It stems from previous empirically-based collaborations with Politecnico di Torino in the study of urban collective memories. By scrutinizing the two cities of Le Locle and La Chaux-de-Fonds jointly inscribed on the UNESCO's World Heritage list in 2009, the project proposes new research methodologies for the study of urban memory. In May, a doctoral seminar was held, with André Corboz's book, *Invention de Carouge, 50 ans après (The Invention of Carouge, 50 Years Later)*, serving as the main talking point.

Lausanne Time Machine

In June, the official presentation of the partnership formed between UNIL and EPFL for the Lausanne Time Machine project took place. Under the coordination of Isabella Di Lenardo of the CDH, this collaboration involves the UNIL-EPFL dhCenter, a consortium of researchers of Time Machine Europe and the City of Lausanne. This partnership aims at providing researchers with a number of archives kept in the main heritage institutions of the region (i.e. the archives of the City of Lausanne, Historical Museum of Lausanne, Cantonal and University Library, Cantonal Museum of Archeology and History, etc.).

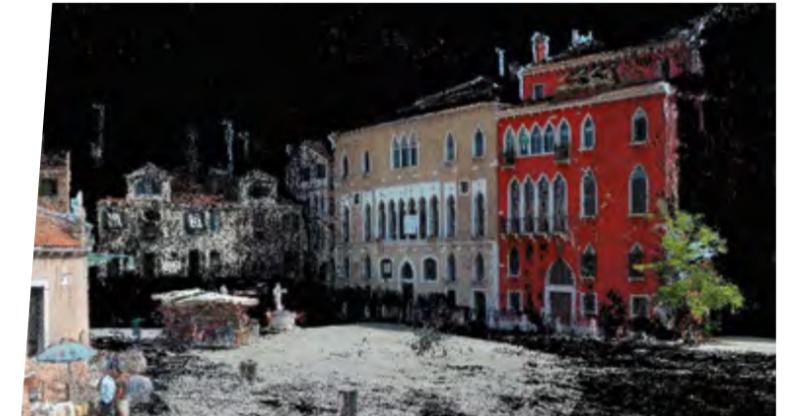


↑
Florence Graezer Bideau and Monique Bolli at the launch of the book, *Realtime: Making Digital China* in Shenzhen
Photo: UABB

THE DHI LABORATORIES



Photogrammetric reconstruction for the Venice Mirror World prototype
Photo: EPFL DHLAB



Digital Humanities Laboratory (DHLAB)

Led by Prof. Frédéric Kaplan

The DHLAB develops new computational approaches for re-discovering the past and anticipating the future. It trains a new generation of digital humanists by developing innovative educational programs as well as didactic technologies.

The Venice Time Machine (VTM) project has digitally reconstructed a highly detailed simulation of the city of Venice over a 1000-year period from historical archives, forming the largest database of Venetian documents ever created in the process. The VTM served as a proof-of-concept for Time Machine Europe, which is now creating local time machines, city by city.

Looking ahead: Venice Time Machine and Time Machine Europe

In 2019, the VTM research expanded in depth and breadth. Despite the decision of one of the main partners (the State Archive of Venice) not to extend its collaboration with EPFL in the coming phases of the project, research is continuing. The first prototype of "Mirror World," a four-dimensional model of Venice that overlaps with the city itself, was created while the DHLAB received a grant from the Swiss National Science

Foundation (SNSF) for the "Parcels of Venice" project. The program additionally hired two new PhD students, Federica Pardini and Raphael Barman.

The Venice Time Machine is now one among twenty other local Time Machines, all of which share similar methodological approaches to the study of history and heritage. This European extension was supported by the Time Machine Coordination and Support Action, was funded by the European Commission in 2019, and led to the creation of the Time Machine Organization.

The collectively written ten-year roadmaps, to be published in 2020, give detailed plans for the development of Time Machine Europe as a "Large-Scale Research Initiative" (LSRI) jointly with the Europeana platform, which already provides free access to more than 60 million documents and digital objects.

Digital and Cognitive Musicology Laboratory (DCML)

Led by Prof. Martin Rohrmeier

The DCML explores music from cognitive, computational, musicological, and psychological perspectives. It combines modern algorithmic methods, corpus research, music-theoretical expertise, and experimental approaches to advance four main research topics: musical structure-building, musicological corpus research, the cognitive foundations of music, and computational modeling. The DCML also engages a global network of experts in musicology, artificial intelligence, and neuroscience to deepen understanding of musical structures using cutting-edge technology.

Through the support of competitive renowned funding, the research at the DCML in 2019 continued advancing the methodological spectrum of musicological research by bridging music theory, computation, and cognition for an expanded understanding of “how music works.” Innovative projects included the compilation of a large corpus of music with experts’ annotations, and music cognition experiments.



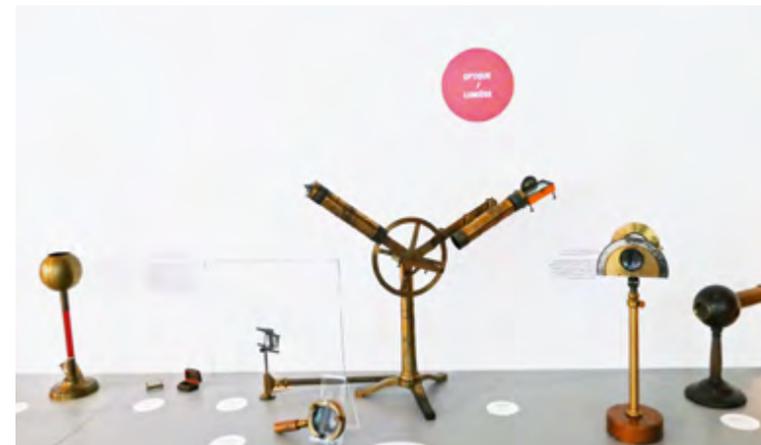
↑
The DCML at the EPFL Open Days in September, 2019
Photo: Celia Luterbacher

Laboratory for Experimental Museology (eM+)

Led by Prof. Sarah Kenderdine

The eM+ is an interdisciplinary initiative at the intersection of immersive visualization technologies, visual analytics, aesthetics, and cultural (big) data. The lab promotes post-cinematic multisensory engagement using experimental platforms and is home to an array of cluster-based 3D systems. The eM+ also works on tangible and intangible heritage and archival materials from Asia, Australasia, and Europe. Researchers use state-of-the-art computer science and human-computer interaction techniques to transform cultural data into advanced, ultra-high-resolution visualizations.

In 2019, the eM+ continued to bring innovative digital imaging technology into museums in collaboration with academic, cultural, and scientific institutions. It produced major installation works integrating cultural heritage with new media art practice, both in Switzerland and abroad, especially in the realms of interactive cinema, augmented reality, and embodied narrative. Professor Kenderdine’s work has received wide recognition as she continues her collaboration with the Program Memory of the World of UNESCO, creating works about numerous world heritage sites.



←
“Quaternion fractal visualization” by Paul Bourke, using the eM+ lab’s immersive fulldome
Photo: Catherine Leutenegger

Laboratory for the History of Science and Technology (LHST)

Led by Prof. Jérôme Baudry

Founded in 2019, the LHST’s mission is to understand the transformations of science and technology in their historical, cultural, and social contexts. In addition to studying the past using digital humanities approaches, the lab explores contemporary developments in science and technology to understand how they shape and are shaped by today’s world. Key research areas include the role of images and visual thinking in science and technology, the history of the digital and of computer science, and the relations between science and technology. The LHST also curates a unique collection of approximately 1,000 historical scientific instruments from the University of Lausanne.

During 2019, the LHST welcomed its new team members, including Dr. Marianna Fenzi, who is supported by a prestigious grant from the Swiss Future Food Initiative, for a three-year research project on current and historical practices related to the use of crop diversity to develop sustainable food systems.

Social Computing Group

Led by Prof. Daniel Gatica-Perez

The Social Computing Group of LIDIAP, the EPFL laboratory of the Idiap Research Institute, works at the intersection of people and technology in everyday life. In doing so, it integrates theories and methods from ubiquitous computing, social media, machine learning, and social sciences to analyze human and social behavior and design systems that support individuals and communities. Current research of the group includes mobile crowdsensing and social media analytics for cities and health and ubiquitous interaction analysis. The group is affiliated with both the School of Engineering (STI) and the CDH.

↓
Light and optics instruments from the UNIL/EPFL Scientific Instruments Collection
Photo: Celia Luterbacher

↓
iStock image credit: alexsl



PHD THESES

The first thesis of the EDDH

The Digital Humanities Institute (DHI) and the Digital and Cognitive Musicology Lab (DCML) were happy to congratulate Fabian Moss for completing his PhD thesis entitled, "Transitions of Tonality: A Model-Based Corpus Study."

This study addresses the subject of tonality, which has been the cornerstone of Western music-theoretical discourse for centuries, using traditional music analysis, data-driven corpus methods, and computational models, concentrating on historical changes of tonality with a particular focus on the 19th century.

Ongoing theses

Raphaël Barman (DHLAB)

"Historical Cadaster as a Computational Object." This research develops and formalizes the process of data extraction from historical cadasters. This data is then used to create an evolutionary model of the population embedded into these documents.

Monique Bolli (IAGS)

"Liminality, Ephemerality, and Marginality with Impact Maker-spaces in the Chinese Urban Fabric: Shanghai, Shenzhen, Beijing, and Addis Ababa." This thesis deals with the narratives and imaginaries about maker cultures and makerspaces which have flourished in recent years in the Chinese urban fabric. What is the government's interest in bringing new narratives supporting innovation into these maker movements? What is the impact on people's lives and what is the outreach of projects born in these spaces? How can innovative research methods be developed to capture the dynamics of such a culture?

Lucia Bordone (IAGS)

By drawing upon sociology and urban anthropology, this thesis aims to explore how the links between collective memory and spaces in contemporary cities change, with a field study of Rome, Italy, as an example.

Gabriele Cecchetti (DCML)

This research explores the interface between formal models of musical structure and their cognitive representation. This will further understanding of the relationships between the way music is structured and its function as a social communicative tool.

Christoph Finkensiep (DCML)

"Modelling Polyphonic Structure in Music." When listening to music, humans are able to identify structural entities such as chords or voices. However, very little is known about how these entities are linked to the musical surface or, for example, what makes us say that two musical fragments form the same harmony. This thesis explores the principles by which sequences of notes form "voices," how this relates to harmony, and how it contributes to a listener's perception of a piece.

Yohann Guffroy (LHST)

"Representing the Invention: Study of the Evolution of Technical Object Design in England (1750-1850)." The objective of this thesis is to understand what role technical object drawing played in the invention process in England and how it evolved between the 18th and 19th centuries. This involves studying the design from the point of view of its material production but also to consider it as a possible language technique.

Daniel Harasim (DCML)

"The Learnability of the Grammar of Jazz: Bayesian Inference of Hierarchical Structures of Jazz Harmony." Music is very rich in all kinds of structure in various dimensions such as melody, timbre, harmony, and rhythm. Experienced jazz musicians, for example, use their harmonic knowledge to coordinate improvisation between multiple musicians. This PhD project studies computational models of harmonic knowledge and focuses on computational learning simulations of how harmonic relations can be inferred from just the music itself.

Johannes Hentschel (DCML)

Musician, music theorist, and educator Johannes is pursuing his thesis in musicology within the SNSF-funded research project, "Distant Listening." Evaluating a big corpus of digital music scores from three centuries, he empirically addresses the evolution of musical language throughout music history.

Leonardo Laurence Impett (DHI)

"Painting by Numbers: Computational Methods for Art History." This research attempts to prototype a new methodology for computational art history in the tradition of Distant Reading (from literary criticism) and based on operationalisation (the transcription of a concept or theory from cultural history into an algorithm). It uses this methodology through three case studies by operationalising concepts from two art historians of the 20th-century,

Aby Warburg and Michael Baxandall, and from the 16th-century Italian painter and art theorist Giovanni Paolo Lomazzo.

Federica Pardini (DHLAB)

"The Cadastral City. A European Urban History Through the Geometry of the 19th Century." The project studies the urban evolution of different European cities through their 19th century cadastres. Thanks to the remarkable similarity of the representations, a large-scale comparative study of cartographic documents as well as the evolution of urban morphology can finally be imagined.

Jessica Pidoux (DHI)

This thesis focuses on the variables that feed algorithms on dating apps and related users' practices by means of quantitative and qualitative methods. Specific pre-defined variables allow humans and systems to quantify personal attributes and calculate scores for finding a partner. Questions driving this research include: What is the learning model shaping the dating experience? More broadly, what are the social stakes underlying this affective-algorithmic matching?



→
Fabian Moss, Martin Rohrmeier,
and Markus Neuwirth
Photo: EPFL

FURTHER RESEARCH

Studying engineering education

One important interface between social sciences and technological disciplines is to better understand the ways in which the latter are taught and learned. To this end, Roland Tormey of the Teaching Support Centre at EPFL (CAPE) joined the CDH to develop a research agenda on engineering education.

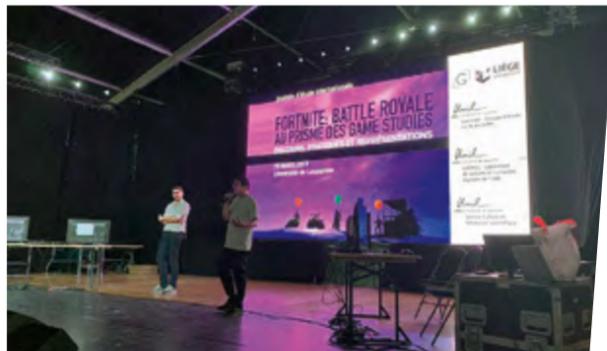
This agenda progressed under three themes in 2019 with the first addressing the conditions under which teachers change and integrate innovative practices into their teaching. The second theme tackled how engineering students learn to work in interdisciplinary teams and manage complex projects. It further included a project on the integration of engineering ethics instruction in technical disciplines. The third theme examined how a learning analytics tool, The Learning Companion, can help students develop self-regulated learning skills through engineering courses.

This work took place in collaboration with the LEARN Centre, CHILI Lab, and the Centre for Digital Education as well as involved international partners.

In addition, some of the innovative interdisciplinary learning programs developed by the IAGS resulted in conference papers and workshops in the area of Scholarship of Teaching and Learning (SOTL).

UNIL Gamelab

Scientific collaborators Selim Krichane and Yannick Rochat are members of the UNIL Gamelab, a study group on video games at the University of Lausanne (UNIL). Both are also lecturers in game studies in the SHS program. With the support of the CDH and UNIL, the Gamelab organized an international seminar in October 2019 entitled, "Languages of Video Games." This seminar gathered 30 game studies researchers from France, Belgium, Canada, and Switzerland.



←
Yannick Rochat and Selim Krichane
of UNIL Gamelab at the 2019
Numerik Games Festival
Photo: Mounir Krichane

THE CROSS PROGRAM

The Collaborative Research on Science and Society (CROSS) program is based on an agreement established between EPFL and the University of Lausanne (UNIL). Under this program, researchers from EPFL and UNIL collaboratively carry out interdisciplinary projects that deal with current issues in society and technology.



←
2019 CROSS Project: "ReMediation"
Researchers analyze the psychological
parameters of a subject during his or her
viewing of a disturbing car accident video.
Photo: Maria Gaci

2019 Theme: Resistance

Through an annual call for projects on a specific theme, CROSS provides competitive grants to support new seed research endeavors that have the potential to grow into full-scale projects. Since 2013, CROSS has launched seven thematic calls and has funded 26 projects (out of 78 competing proposals) for a total of CHF 1.5 million.

The 2019 CROSS Call for Projects on the theme of resistance funded four EPFL-UNIL projects (out of 12 proposals received) for a total of CHF 240k. These interdisciplinary projects

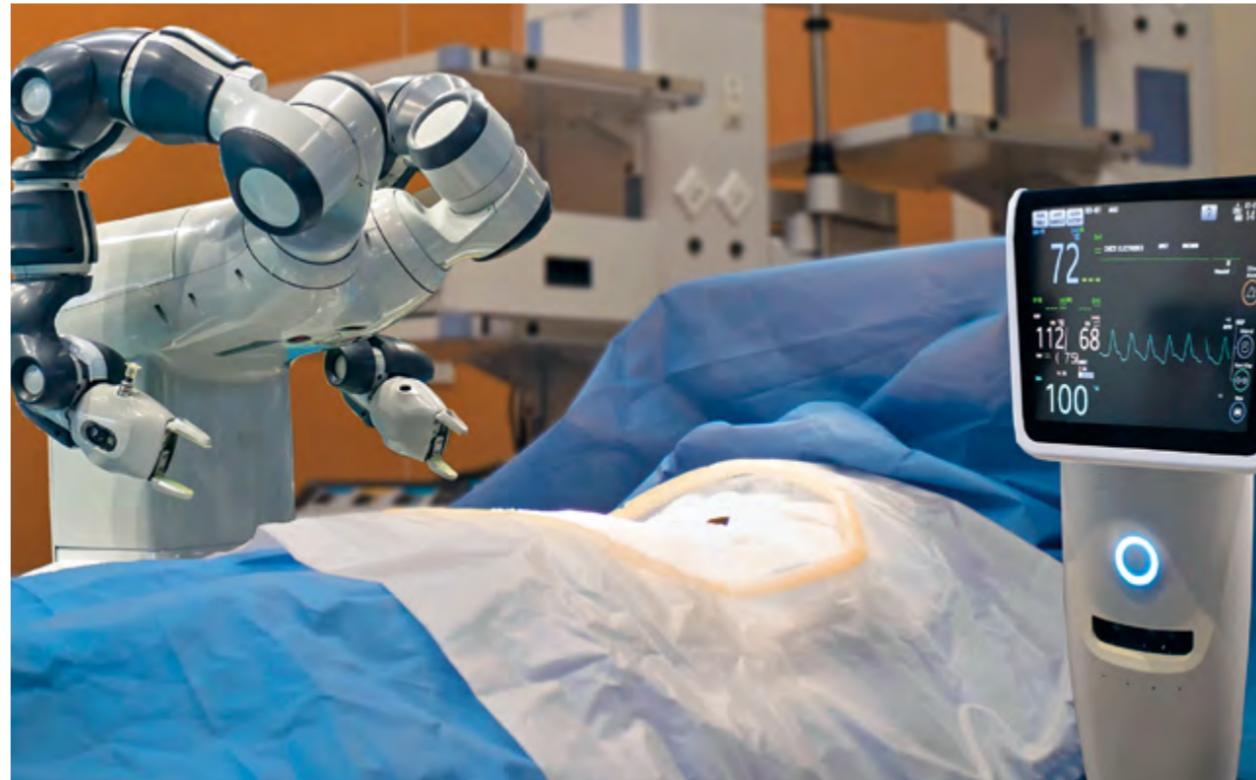
addressed key societal and technological questions linked to health, social media, machines, employment, public participation, and ethics in innovative and promising ways and contributed to future research collaborations between EPFL and UNIL.

SELECTED PROJECTS

Four 2019 projects on the theme, Resistance

- “ReMediation: Improving Resistance to Trauma through Digital Mediation”
Denis Gillet (EPFL STI IEL)
and Delphine Preissmann (UNIL SSP FBM)
- “Resisting Human Obsolescence in a World Disrupted by Machines”
Rafael Lalive (UNIL HEC)
and Dario Floreano (EPFL STI LIS)
- “Leveraging On-Device Smartphone Inference to Address Resistance to Participate in Social Surveys”
Caroline Roberts (UNIL SSP FORS)
and Daniel Gatica-Perez (EPFL STI LIDIAP)
- “Mellowing Extreme Views via Celebrity Spokespeople - But Gently”
Robert West (EPFL IC DLAB)
and Ahmad Abu-Akel (UNIL SSP IP)

CROSS 2019 Project: “Resisting Human Obsolescence in a World Disrupted by Machines”
iStock image credit: Ekkasit919



PROMOTIONS AND APPOINTMENTS



Jérôme Baudry, tenure-track assistant professor and director of the LHST
Photo: Alain Herzog

Professors promoted and appointed in 2019

- Frédéric Kaplan, promoted to Associate Professor of Digital Humanities in his current role as director of the Laboratory of Digital Humanities (DHLab).
- Jérôme Baudry, appointed as tenure-track Assistant Professor, and director of the new Laboratory for the History of Science and Technology (LHST).

Courtesy appointments bestowed in 2019

- Sabine Süsstrunk, Full Professor at the School of Computer and Communications Sciences (IC): Courtesy appointment as director of the Digital Humanities Institute.
- Daniel Gatica-Perez, Adjunct Professor at the STI school and at the LIDIAP - the EPFL laboratory of the Idiap Research Institute; Head of the Social Computing Group: Courtesy appointment as director of the Digital Humanities section.
- Mathieu Salzmann, Scientific Collaborator at the IC school: Courtesy appointment as scientific collaborator and lecturer in the Master in Digital Humanities program.

GRANTS AND RESEARCH PROJECTS IN 2019

DHI

Project Title	Principal Investigator(s)	Funding Agency
From Bach to the Beatles: Exploring Compositional Building Blocks and Style Change with Hermeneutic and Computational Methods	Markus Neuwirth	VolkswagenStiftung
PMSB - Principles of Musical Structure Building: Theory, Computation, and Cognition	Martin Rohrmeier	European Research Council (ERC)
Distant Listening - The Development of Harmony over Three Centuries (1700-2000)	Martin Rohrmeier	SNSF
Time Machine	Frédéric Kaplan	H2020 - CSA
READ: Recognition and Enrichment of Archival Documents	Frédéric Kaplan	H2020 - Excellent Science
Garzoni: Apprenticeship, Work, Society in Early Modern Venice (16th-18th centuries)	Frédéric Kaplan, Maud Ehrmann	SNSF
Impresso Media Monitoring of the Past	Frédéric Kaplan, Maud Ehrmann	SNSF
ScanVan: A Distributed 3d Digitization Platform for Cities	Frédéric Kaplan	SNSF
Parcels of Venice	Frédéric Kaplan, Isabella di Lenardo	SNSF
Picturing Science and Technology: Drawings, Graphs, Diagrams	Jérôme Baudry	LHST
Digital History of Science	Jérôme Baudry	LHST
Owning Science: A History of Intellectual Property	Jérôme Baudry	LHST
SAVOIRS	Christian Jacob	EHESS, FMSH, LHST
Rethinking Science and Public Participation	Bruno J. Strasser	SNSF, University of Geneva
Interconnected Cropscales: Antagonism and Complementarity in Conservation and Breeding	Marianna Fenzi	Future Food Initiative
Cultural Sensorium: An Indigenous Ethnography of the Senses	Sarah Kenderdine, Jennifer Biddle	Australian Research Council
Muse: The Voice of the Visitor	Sarah Kenderdine	Engagement Migros
Atlas of Maritime Buddhism. Transforming Visualization in Museums: Deep Mapping for Narrative Coherence	Sarah Kenderdine, Dennis del Favero, Michael Thielscher	Australian Research Council
Digital Lyric: Beyond the Book	Antonio Rodriguez, Sarah Kenderdine	SNSF
Transmission through Imitation: Transforming Intangible Cultural Heritage Archives through Virtual Reality and Sports Science	Sarah Kenderdine, Dennis Hauw	EPFL-UNIL CROSS Program
Winter at Tantara Festival in AI Ula	Sarah Kenderdine	RCU
Squatty Project for the JOJ 2020	Sarah Kenderdine	EPFL

IAGS

Project Title	Principal Investigator(s)	Funding Agency
Makerspaces: Politics and Communities of Innovation in Contemporary China	Florence Graezer Bideau	SNSF
Hybrid Cities: Informal Resistances to the Violence of Urbanization in China, India, and Venezuela	Yves Pedrazzini, Florence Graezer Bideau	SNSF
Transition towards Urban Sustainability through Socially Integrative Cities in the EU and in China	Bernhard Mueller, Florence Graezer Bideau	H2020
Memory and the City: Assessing Tools for Interdisciplinary Research and Teaching	Filippo de Pieri, Florence Graezer Bideau	Compagnia di San Paolo. Program for the Internationalization of Research, Politecnico di Torino
Metare App: Appropriating Digital Technologies for Tikuna Language Revitalization in the Colombian Amazon	Johanna Gonçalves Martin	EPFL - CODEV
Open-ended Project Design Companion	Marius Aeberli, Marc Laperrouza	EPFL - DRIL
The Invention of Carouge 50 Years After: Crossing History, Theory, and Urban Ethnography	Florence Grazer Bideau, Elena Cogato Lanza	swissuniversities
China Hardware Innovation Camp (CHIC)	Marc Laperrouza, Marius Aeberli	EPFL - MAKE

OTHER

Project Title	Principal Investigator(s)	Funding Agency
Lausanne Time Machine	Isabella di Lenardo, Béla Kapossy	UNIL - EPFL
Video Game Study	Loise Bilat, David Javet, Selim Krichane, Isaac Pante, Yannick Rochat	EPFL - CDH, UNIL - SLI
Uni Analytics: What, How, and Why Do Different Educational Stakeholders Use Learning Analytics in Higher Education?	Pierre Dillenbourg, Roland Tormey, Francisco Pinto, Patrick Jermann	SNSF
LOIS: Leveraging on-device smartphone inference to Address Resistance to Participate in Social Surveys	Caroline Roberts, Daniel Gatica-Perez, Jessica Herzing	EPFL - UNIL CROSS Program

PUBLICATIONS

Publications of the CDH - Figures 2019

Total publications in Infoscience by end of 2019



Library Support

During 2019, the liaison librarian for the CDH, Jacqueline Despond, provided systematic support to lecturers, students, and researchers on issues related to: citational good practices,

information searches, copyrights and licenses, publication contracts, plagiarism, Open Access, and so forth.



Public engage- ment

ARTLAB

Pavilion A: DataSquare
Pavilion B
Montreux Jazz Café and Festival Archives
Administration and governance
Upcoming exhibitions

CDH-CULTURE

Fixed artworks on campus
Events organized in 2019
Free tickets daily contest

ARTIST-IN-RESIDENCE

New Artist-in-Residence program
First invited artist: Nora Al-Badri

HIGHLIGHTS 2019

CDH at EPFL open days
RTS show "In the Digital Age"
Launch of the UNIL-EPFL dhCenter

The CDH represents a natural structure for building bridges between culture, art, campus life, teaching, research, and new technologies at EPFL. It also takes to heart its role as an initiator of public debates on key themes, such as the impact of digital technology on humans and society.

ArtLab carries out public engagement activities and serves as a welcoming space for the EPFL community as well as for the external public. This space is ideal for the development of large exhibitions in addition to smaller events such as concerts, screenings, artistic performances, and conferences.

In addition, CDH-Culture provides opportunities for engagement with cultural and artistic offerings throughout the entire campus. Students, researchers, and collaborators are also invited to participate in cultural events in the city of Lausanne, thanks to numerous partnerships.

ARTLAB

Built in 2016 right in the heart of the campus, ArtLab is a 250-meter long building composed of three different parts, each dedicated to the interactions between science and arts: Pavillon A (DataSquare), Pavillon B, and the Montreux Jazz Café and Festival Archives. Japanese architect Kengo Kuma designed the building.



Photo: Adrien Barakat

Pavilion A: DataSquare

In 2019, ArtLab improved its programming by freeing up a 130 m² space in Pavilion A. This space can now host up to 80 people for round tables, small symposia, pop up exhibitions, and art performances. The inaugural events included a series of weekly radio broadcasts recorded live

by Radio Télévision Suisse (RTS), dance shows, and demonstrations by the laboratories on the digital humanities activities of the CDH. This space also presents two EPFL projects (Venice Time Machine and Blue Brain Project).

Pavilion B

The most spacious location in the building presents temporary exhibitions developed by the ArtLab team under the direction of Professor Sarah Kenderdine, who also serves as the director of the Laboratory of Experimental Museology (eM+).

The year 2019 began with the exhibition dedicated to the Catalan philosopher and polymath Ramon Llull (1232-1316) whose work in the fields of art, religion and politics still fascinates thinkers, artists, and researchers.

In celebration of EPFL's 50th anniversary, ArtLab paid homage to the campus and its history through two exhibitions, the "Infinity Room" projects.

Exhibitions

- Thinking Machines. Ramon Llull and the ars combinatoria
From November 3, 2018 to March 10, 2019
3,311 admissions, 56 days (only 2019)
This four-month exhibition reinterpreted the late Middle Ages in the works of Ramon Llull and offered a space in which visitors could reflect on the significance of Lullian combinatorics for generative and algorithmic principles which are now utilized in advanced technologies.
- Infinity Room I
From April 12 to July 28, 2019
4,439 admissions, 92 days
This exhibition presented in augmented form the photographs from the book *Perspectives on EPFL*, commissioned by the EPFL presidency in collaboration with the photography museum, Musée de l'Elysée de Lausanne. The photographers involved were: Catherine Leutenegger, Bogdan Konopka, and Olivier Christinat.

We were extremely saddened by the news that Bogdan Konopka passed away only a few weeks after the opening of Infinity Room I. His photographs are now in the collection of EPFL, an enduring record of place and also a record of the exceptional vision of this man.

- Infinity Room 2
From September 13, 2019 to March 22, 2020
6,588 admissions, 87 days (only 2019)
This exhibition is contained within in the archives of EPFL. Bringing together augmented reality, virtual reality, information visualization, interactivity, and machine learning, Infinity Room 2 studied how institutional archives evolve by involving over 50 laboratories at EPFL.

During the exhibition period, ArtLab is open from Tuesdays to Sundays. Admission is free.

Visits

Total number of admissions in 2019: **14,338**

EPFL community: **67%**

Adults- AHV/IV **72%**, Students **15%**, Children **13%**

School visits

In collaboration with the Science Promotion Service (SPS), ArtLab hosted 13 classes (238 students) for the "Infinity Room 2" exhibition and 21 classes for the "Thinking Machines" exhibition (385 students). Thematic workshops further supplemented the visits. Students aged 13 to 15 came mainly from schools in the canton of Vaud.

Free guided visits on Saturday morning

Approximately 10 guided tours in French were offered to groups of 15 to 30 people.

Lunchtime visits for the EPFL community

Approximately 20 guided tours in French and English were offered to groups of 20 to 40 students and collaborators.

Most of the visits are led by Anne-Gaëlle Lardeau and Giulia Bini.

Montreux Jazz Café and Festival Archives

The Montreux Jazz Café is located in the southern part of the ArtLab building. In addition to being a café-restaurant, it is dedicated to showcasing the archives of the Montreux Jazz Festival, which is included on UNESCO's Memory of the World Register. More than 5,000 concerts (14,000 tapes in total, 11,000 hours of video recording, and 6,000 hours of audio recording) have been digitized and preserved as part of the Montreux Jazz Digital Project led by the EPFL Metamedia Center in collaboration with several laboratories. Besides leading the digitization and preservation of the recordings, EPFL has designed devices to browse, visualize, and listen to the archives that are available to the public.

Administration and governance

ArtLab's Scientific Committee first convened in 2019, drawing its members from professors, students, and staff of EPFL's Mediacom service and representatives from local universities and museums. The Committee discusses the activities, partnerships, communication strategies, and identity of ArtLab.

Restructuring of the operational team led to growth from 7.4 FTE in 2018 to 7.7 FTE at the end of 2019 and 8.5 FTE at the beginning of 2020.

Upcoming exhibitions

With the upcoming exhibitions at Pavilion B, "Beyond Robotics" as well as the Pictet Prize on the theme of Hope, the curatorial vision at ArtLab looks towards a hopeful future for society and the world. In 2020 Pavilion A will host the exhibition "Neuronal Ancestral Sculptures Series," which is a result of the work of the first Artist-in-Residence of the CDH, Nora Al-Badri.



"Designing for the Sixth Extinction," 2013, from the exhibition "Beyond Robotics"
Photo: Alexandra Daisy Ginsberg

CDH-CULTURE

In 2019, EPFL Cultural and Artistic Affairs founded a unit called CDH-Culture, directed by Véronique Mauron Layaz. The unit set up a specific program touching upon the fields of music, dance, performance, and contemporary art, with the aim of offering diverse artistic events to the EPFL community and the broader public in collaboration with local cultural institutions. The unit has carried out projects with lecturers and students to highlight both young emerging talents and experienced artists. These events are chosen for their ability to open up new horizons and to inject a different form of reflection and creativity.



June 22nd

Presentation of the booklet *Haus am Gern*, published in collaboration with art&fiction, issued from the "Fireplace" installation set up under the vaults of the Rolex Learning Center in 2018. This booklet brings together an artist's notebook and texts by Hélène Mariéthoz (philosopher and curator), Sonia Curnier (architect), and Véronique Mauron Layaz (art historian and curator). The publication was presented during the Nuit des Images - Night of Images at the Musée de l'Elysée.

Events organized in 2019

May 2nd

Dance Festival - Fête de la Danse. As part of this national event, CDH-Culture welcomed the Quinch Quinch collective on the Esplanade for Happy Hype, a street dance show.

↑
The Quinch Quinch Collective
Photo: Nadja Tarra

→
Recital by Cédric Pescia
Photo: Alain Herzog



October 1st

Cédric Pescia performed a piano concert featuring pieces by Beethoven and John Cage to a diverse audience at the Rolex Forum, in partnership with the Society of Contemporary Music (SMC) of Lausanne.

October 8th, November 13th, December 11th

"Sévelin moves to EPFL". Three dance performances chosen in collaboration with the Théâtre Sévelin in Lausanne took place in Pavilion A of ArtLab (DataSquare) during lunch breaks.

December 12th

The Lausanne Chamber of Students Orchestra (OChE) performed Giuseppe Balducci's miniature Italian opera, "Il Conte di Marsico", at the Rolex Forum. The young conductor Eugène Carmona adapted the score for orchestra and six young professional singers.



↑
"Sévelin moves to EPFL"
Photo: Virginie Martin Nunez

Free tickets daily contest

Created by EPFL Cultural and Artistic Affairs and implemented by the CDH, the platform "offres-culturelles.epfl.ch" offers a near daily contest allowing students and collaborators on campus to win free tickets for artistic and cultural events such as theater plays, concerts, and exhibitions.

In 2019, over 70 cultural institutions in the region offered more than 3,500 tickets.



↑
"La Pulpeuse" (1973), white marble, 203 x 205 x 105 cm
Artist: Antoine Poncet
On loan from the Swiss Federal Office for Culture,
installation under the vault of the Rolex Learning Center
in December 2019

Fixed artworks on campus

The CDH-Culture program oversees the conservation of the nineteen permanent artworks that are now present on the EPFL campus. In 2019, maintenance and cleaning of the sculpture of Gillian White and Albert Siegenthaler, "Echodrome" (1985) was carried out. In December 2019, the EPFL Campus welcomed two new artworks on loan from the Swiss Federal Office for Culture.



←
"Figur III" (1961), granite, 260 x 50 x 50 cm.
Artist: Hans Aeschbacher
On loan from the Swiss Federal Office
for Culture, installation at the Diagonale EPFL
in December 2019

"Echodrome" (1985), painted steel, modules fixed
on undulating paved ground
Artists: Gillian White and Albert Siegenthaler
Installation: Avenue Piccard, EPFL
Photo: Alain Herzog



ARTIST-IN-RESIDENCE



New Artist-in-Residence program

The Artist-in-Residence Program of the CDH aims to promote research linking art, science, and digital culture. It supports six- to twelve-month residencies of an invited artist who works in dialogue with EPFL students, scientists, and staff.

First invited artist: Nora Al-Badri

The first invited artist within this program on its 2019 pilot phase was Nora Al-Badri, who was hosted by the Laboratory for Experimental Museology (eM+). A multidisciplinary artist and trained political scientist, her research at the eM+ expands on Artificial Intelligence (AI) and museum practices as a form of techno-heritage and as a decolonial method.

Her work will give rise to an exhibition at the ArtLab in May 2020 focusing on Iraq and its archaeological artifacts by applying GANs (generative adversarial networks).

↑ "3D print still-life photography"
Photo: Nelles/Al-Badri

HIGHLIGHTS 2019

CDH at EPFL open days

The CDH played a key role at the EPFL Open Days on September 14-15th with conferences and exhibitions that attracted a noteworthy number of participants. This was an excellent occasion for the new communication team of CDH, Virginie Martin Nunez and Celia Luterbacher to show all that the CDH does for the broader public.



↑ Roundtable debate on the theme, "Humanity, machines and data: what future for artificial intelligence?"
Photo: Alain Herzog

→ *L'esprit sorcier* with Fred Courant, Eric Hoesli, and two students from the STAS Minor
Photo: Virginie Martin Nunez

CONFERENCES

"Humanity, machines, and data: what's the future for artificial intelligence?"

SwissTech Convention Center - Sunday, September 15th
In collaboration with IC school, the CDH organized a round-table moderated by RTS journalist Anne Laure Gannac. The President of EPFL Prof. Martin Vetterli; Professors Sabine Süssstrunk, Jamie Paik, and Frédéric Kaplan from EPFL; and Daniela Cherqui-Ducret, cultural and social anthropologist from UNIL, discussed the relevance of artificial intelligence in their own research and its implications for society.

Participation in *L'esprit sorcier*

SwissTech Convention Center
Saturday, September 14th and Sunday, September 15th
Fred, the star host of the famous show "C'est pas sorcier" ("It's not rocket science") presented quizzes, mystery items, and debates. Professors Frédéric Kaplan, Daniel Gatica-Perez, and Eric Hoesli as well as students from the STAS Minor and CHIC programs participated in several of these activities.





Behind the scenes at EPFL

Halls of the Rolex Learning Center from September 12th to October 6th

In collaboration with CDH-Culture, three lecturers from the SHS program exhibited the photographic and sociological works of their students. This exhibition presented some of the non-academic professions at EPFL and the work activities essential to daily life on the campus.



←
"Digital Humanities Unveiled!"
EPFL Open Days 2019
Photo: Alain Herzog



↑
"Behind the Scenes at EPFL",
EPFL Open Days 2019
Photo: Alain Herzog

EXHIBITIONS

Digital humanities unveiled!

ArtLab, Pavillon A (DataSquare) from September 14th - 22nd

Eight stands from the Digital Humanities Institute (DHI) invited a large audience to discover research projects combining digital tools with the study of art, history, social sciences, and culture.

EPFL's first building

Terrasses du Centre Midi – Permanent exhibition

This exhibition, which will remain permanent, invites rediscovery of the architecture of the first buildings of the school in Ecublens and reveals the richness of its architecture through a series of panels scattered on the terraces of the Center Midi. It is carried out jointly by students from the SHS program at EPFL and the Faculty of Arts at UNIL.

Exhibition SHS/ECAL

Main entrance of the SG building (Architecture)

September 14th and 15th

This exhibition showed the works of students enrolled in the Graphic Design and Industrial Design courses led by ECAL at the ECAL+EPFL Lab as part of the SHS program. Students developed innovative projects ranging from ceramic lighting and accessories to posters and graphics editing.



↑
SHS/ECAL exhibition, EPFL
Open Days 2019
Photo: Alain Herzog

RTS show "In the Digital Age"

The CDH collaborated with the RTS to create the radio show series, "In the Digital Age." EPFL and UNIL professors and lecturers, together with external experts representing culture, politics, civil society, and industry, partook in a public panel on four themes revolving around the effects of digital technology on everyday lives. Recordings took place at ArtLab's DataSquare in November.

The four themes addressed:

- Privacy in the Digital Age
How can we protect our private sphere without giving up digital tools that are gaining relevance in our lives?
- Engagement in the Digital Age
What impact does the digital have on our political awareness and on our public engagement?
- Memory in the Digital Age
Are digital tools a threat or a support for our individual, collective, or cultural memory?
- Creativity in the Digital Age
What do digital tools bring to creation? Are the borders between digital art and contemporary art still relevant?



Launch of the UNIL-EPFL dhCenter

The UNIL-EPFL dhCenter interdisciplinary research platform was officially launched at ArtLab on October 31, 2019. It was set up jointly by both institutions to facilitate collaboration between researchers working on the multiple dimensions of digital transformation and dataification of the world.

The dhCenter develops digital studies across the arts, humanities, and social sciences, fostering an energetic and interdisciplinary community of practice of about 80 researchers from EPFL, including from the DHI of the CDH, and UNIL.

↑
Recording the show,
"In the Digital Age"
Photo: Gabriela Tejada

Finances and per- sonnel

EXPENSES

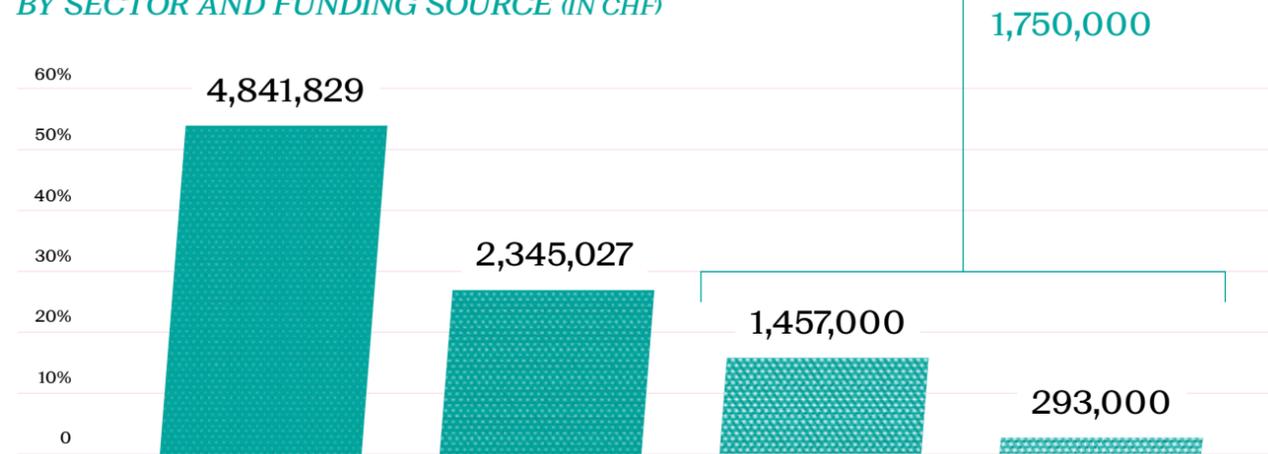
Full-year expenditure by sector and funding source
Expenditure of third-party funding by funding source

HUMAN RESOURCES

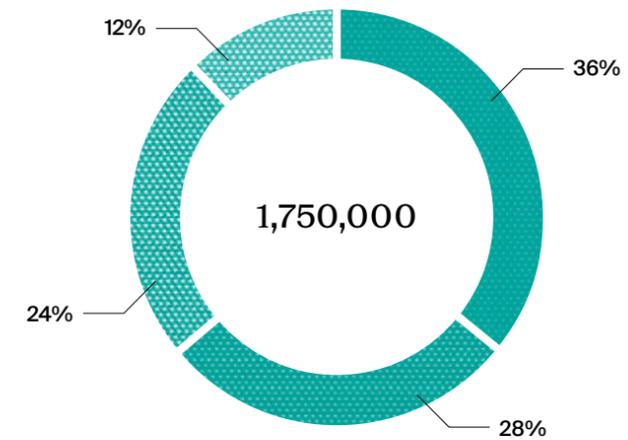
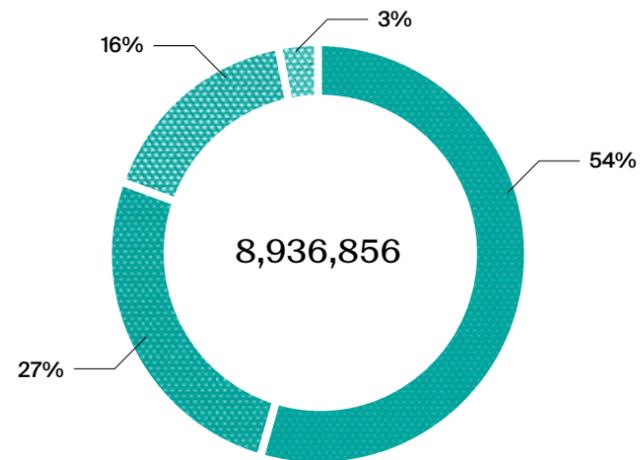
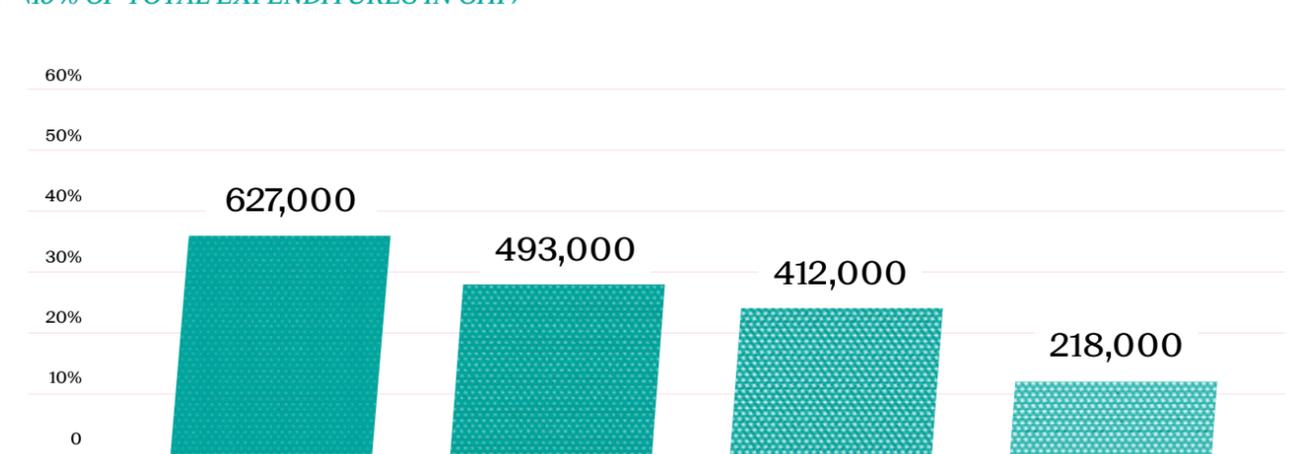
Distribution of staff by category
Distribution of staff by source of funding
Distribution of staff by gender
Staff evolution

EXPENSES

FULL-YEAR EXPENDITURE BY SECTOR AND FUNDING SOURCE (IN CHF)



EXPENDITURE OF THIRD-PARTY FUNDING BY FUNDING SOURCE (19% OF TOTAL EXPENDITURES IN CHF)

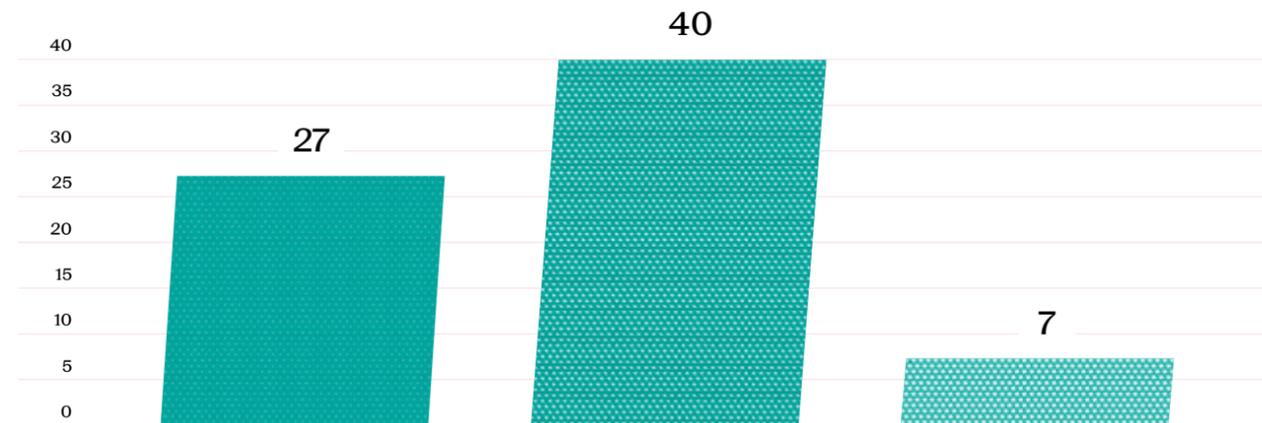


■ Internal salaries (EPFL)
 ■ Internal operating costs (EPFL)
 ■ External salaries (third-party funding)
 ■ External operating costs (third-party funding)

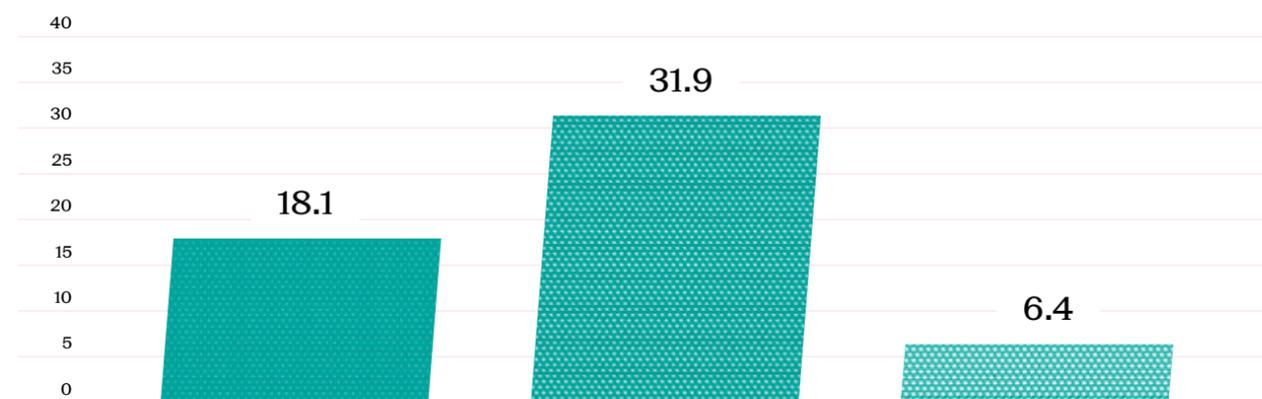
■ Private and non-profit foundations
 ■ SNSF
 ■ H2020
 ■ Various

HUMAN RESOURCES

DISTRIBUTION OF STAFF BY CATEGORY



DISTRIBUTION OF STAFF (FTE) BY CATEGORY



■ Administrative and technical personnel
 ■ Academic personnel
 ■ Professors and Senior Scientists

DISTRIBUTION OF STAFF BY SOURCE OF FUNDING

Category	Internal funding	Third-party funding	Total	Women	Men	Total
Administrative and technical personnel	25	2	27	19	8	27
Academic personnel	24	16	40	18	22	40
Professors and Senior Scientists	7	0	7	2	5	7
TOTAL	56	18	74	39	35	74

BY GENDER

DISTRIBUTION OF STAFF (FTE) BY SOURCE OF FUNDING

Category	Internal funding	Third-party funding	Total	Women	Men	Total
Administrative and technical personnel	16.6	1.5	18.1	12	6.1	18.1
Academic personnel	18.5	13.4	31.9	13.4	18.5	31.9
Professors and Senior Scientists	6.4	0	6.4	2	4.4	6.4
TOTAL	41.5	14.9	56.4	27.4	29	56.4

BY GENDER (FTE)

STAFF EVOLUTION (2015-2019)

Category	2015	2016	2017	2018	2019
Staff	28	33	58	52	74
Staff (FTE)	22.7	28.1	42.5	41.4	56.4
Share of women (FTE)	11.5	11.4	18.9	18.1	27.4

PARTNERSHIPS AND COLLABORATIONS

The CDH partners mainly with universities and research organizations; art and cultural institutions; and private and public foundations, government entities, companies, and nonprofit organizations. These are based primarily in Switzerland, as well as in Europe and the rest of the world (notably in Asia).

These collaborations involve various organizational structures, relationships, and arrangements that are essential for the CDH to effectively carry out its research, education, and public outreach.

The maps

The main collaborations of the CDH are represented here in the form of maps. The three scales chosen illustrate the diversity and concentration of these collaborations: Swiss (Fig. 1), European (Fig. 2), and global (Fig. 3).

The CDH has chosen to represent the number and diversity of its partnerships and collaborations by utilizing data visualizations as a reflection of its role at EPFL. The visual representation of data using digital technology brings new dimensions

to interpretation by enhancing understanding while at the same time inspiring fresh insights and aesthetic appreciation. It is this intersection of the quantitative and the qualitative, and of the digital and the human, that lies at the heart of the CDH's mission.

Fig. 1
CDH's main collaborations in Switzerland by type of institution and concentration in each city.

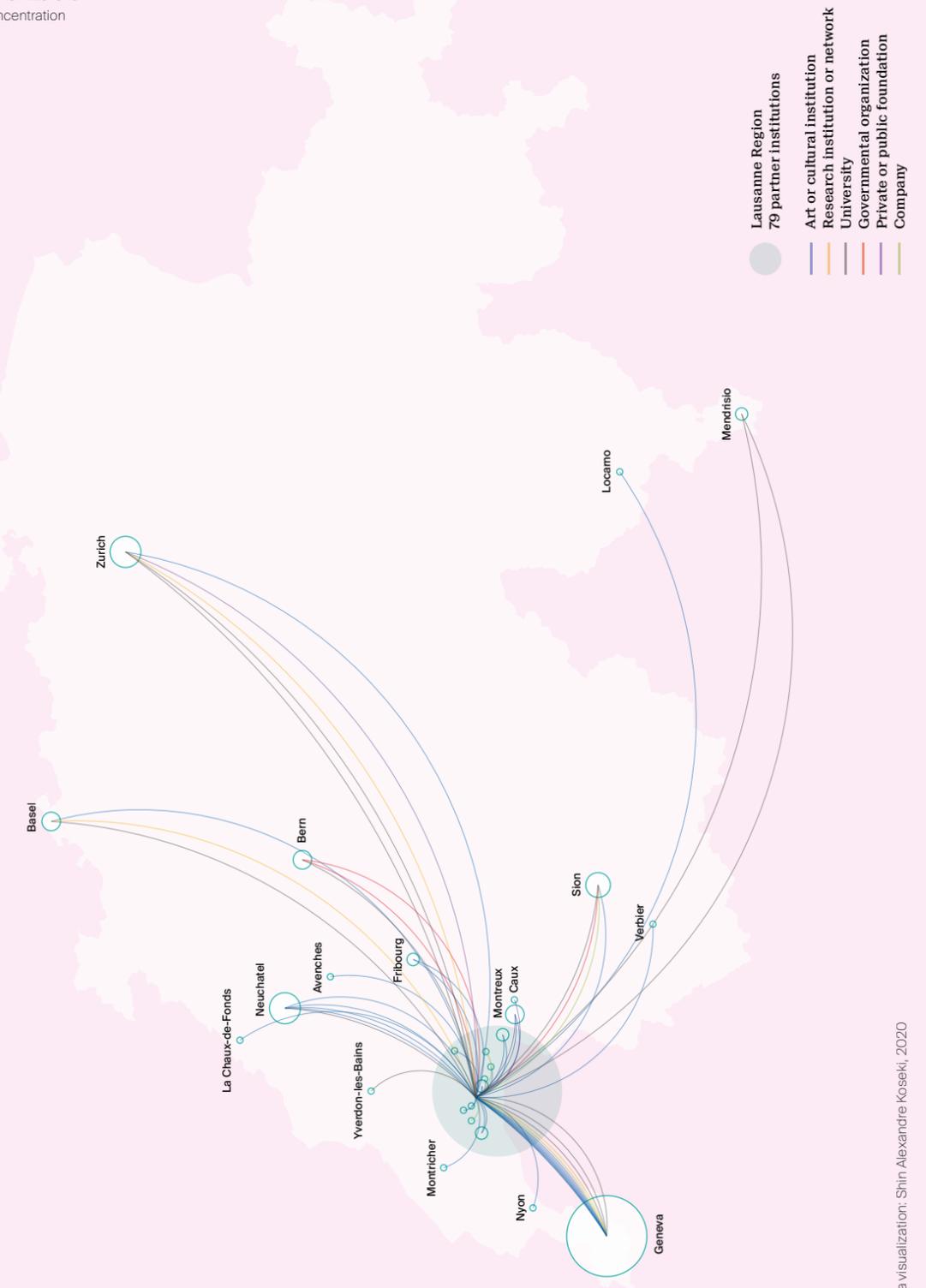


Fig. 2
CDH's main collaborations in Europe by type of institution and concentration in each city.

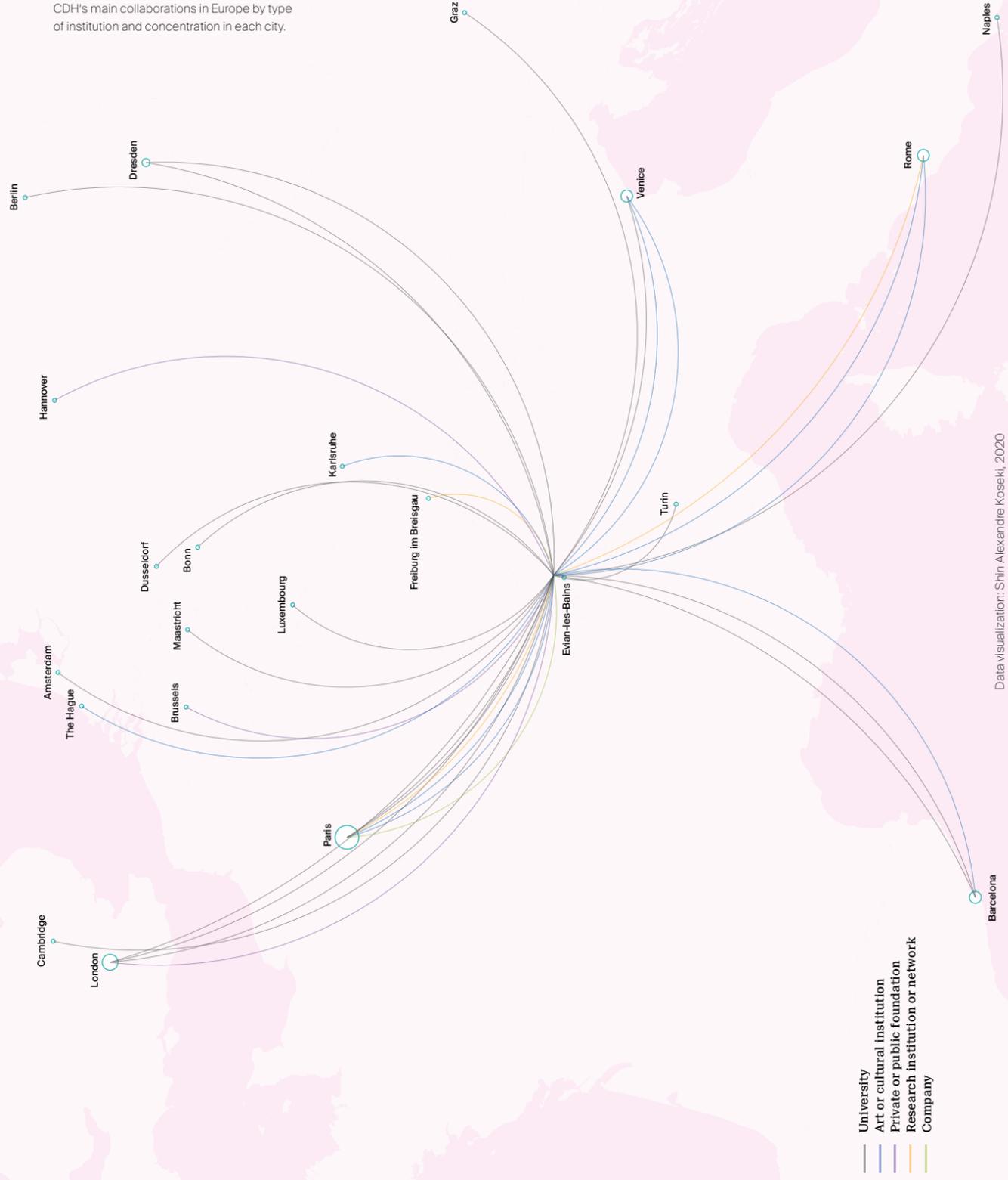
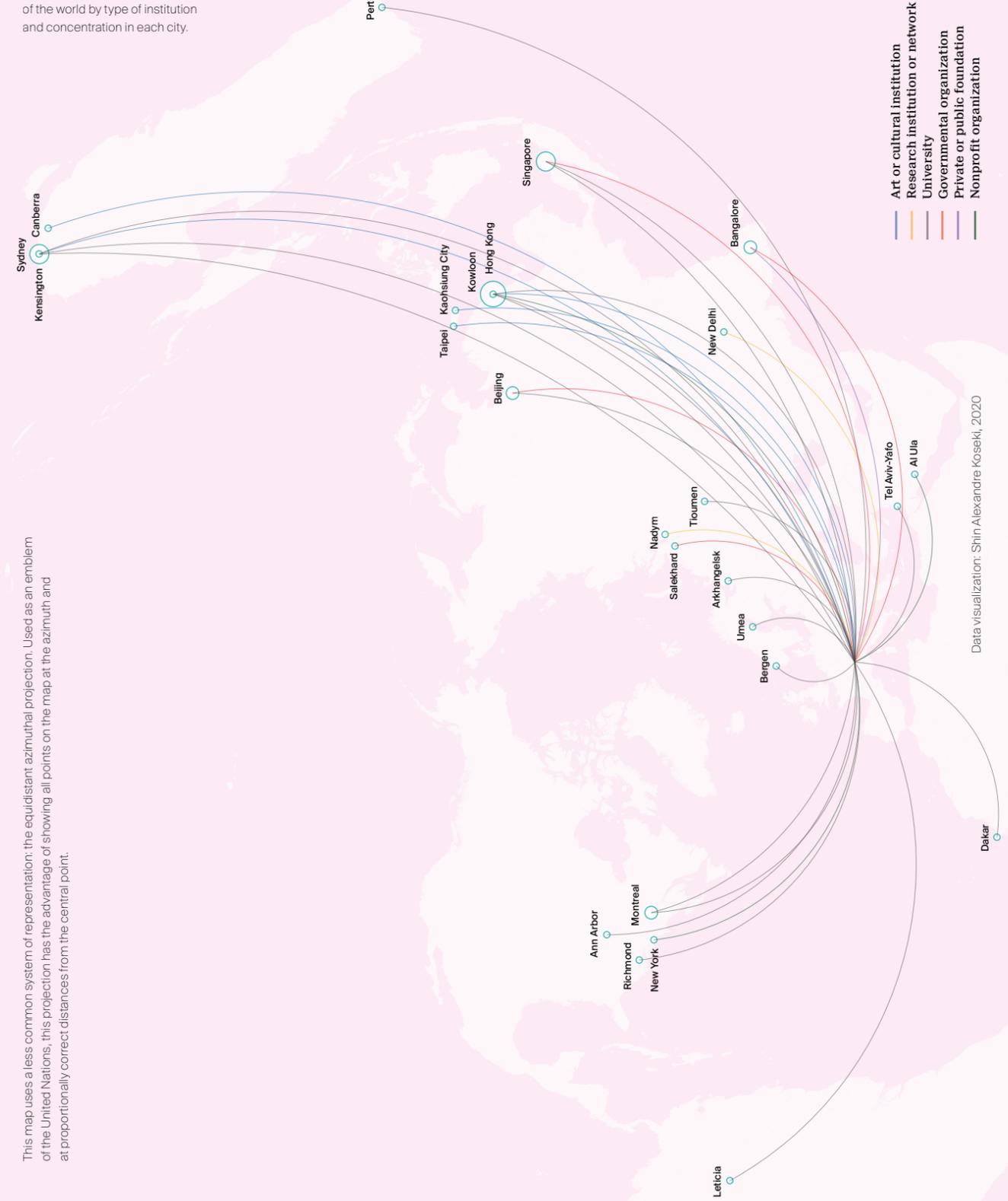


Fig. 3
CDH's main collaborations in the rest of the world by type of institution and concentration in each city.



This map uses a less common system of representation; the equidistant azimuthal projection. Used as an emblem of the United Nations, this projection has the advantage of showing all points on the map at the azimuth and at proportionally correct distances from the central point.

PUBLISHER

College of Humanities (CDH)

CONCEPT AND WRITING

College of Humanities (CDH)

CONCEPT AND GRAPHIC DESIGN

Oxyde

DATA VISUALIZATION

Shin Koseki

PHOTOGRAPHY

College of Humanities (CDH)

Alain Herzog

Shutterstock

PHOTOLITHOGRAPHY

A point nommé

PROOFREADING AND EDITING

Marion Beetschen

Deniz Daser

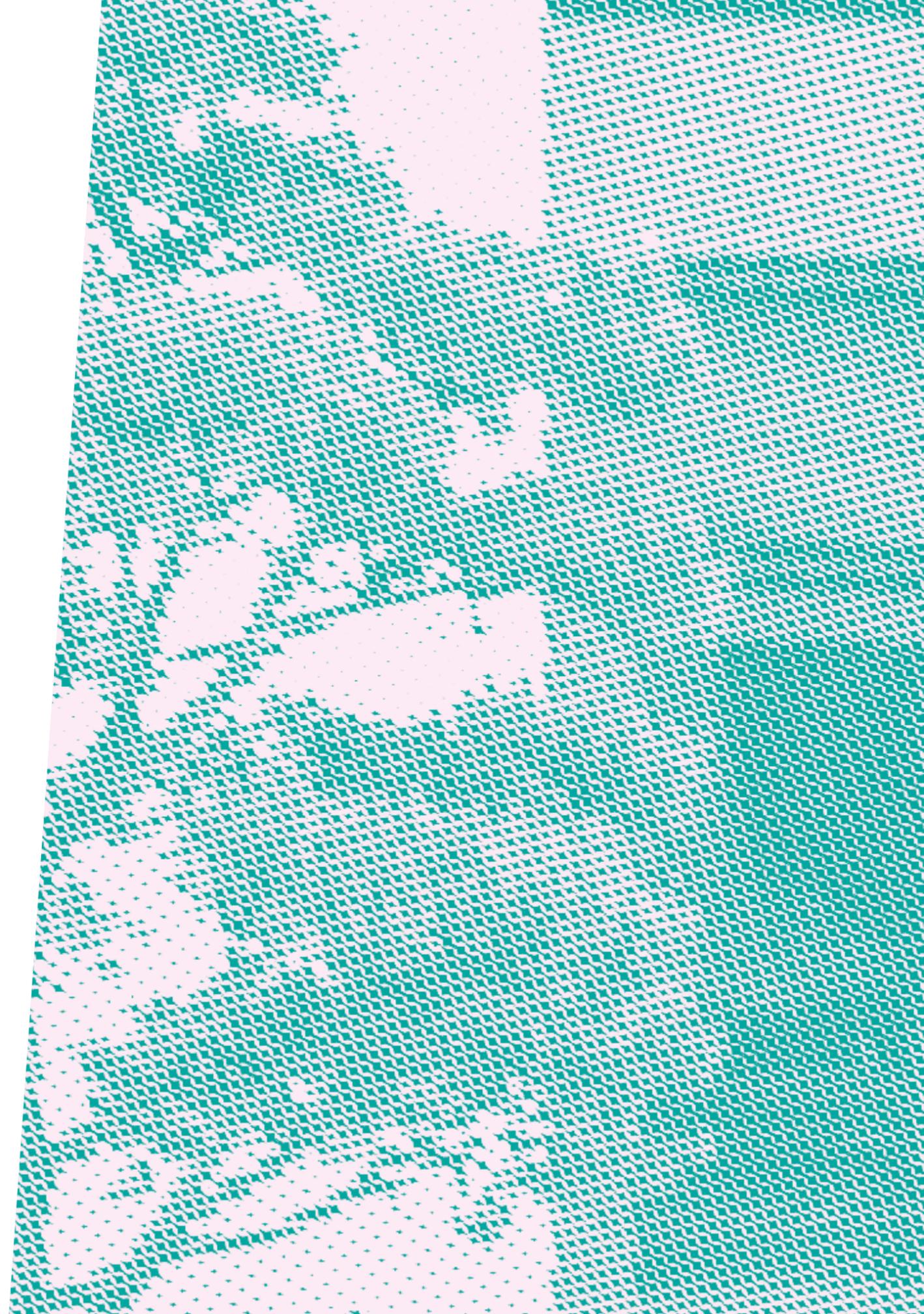
Marco Di Biase

PRINTING

Repro - Centre d'impression EPFL

Papier FSC

© CDH, juin 2020



DIRECTION

Béla Kapossy, Dean
Gabriela Tejada, Academic deputy

ADMINISTRATION AND FINANCES

Nicole Aghroum, Financial and administrative manager

SHS PROGRAM

Néjia Dahmouni Martin, SHS program coordinator
Christine Farget, Administrative assistant, Global Issues program

INSTITUTE FOR AREA AND GLOBAL STUDIES (IAGS)

Isabelle Hügli, Administrative assistant

DIGITAL HUMANITIES INSTITUTE (DHI)

Kathleen Collins, Deputy of section
Jocelyne Vassalli, Administrative assistant

COMMUNICATION

Virginie Martin Nunez, Communication manager
Celia Luterbacher, Journalist

CDH-CULTURE

Véronique Mauron Layaz, CDH-Culture manager

ARTLAB

Anne-Gaëlle Lardeau, Manager

CONTACT

CDH-EPFL
Centre Midi CM 2 267
Station 10
CH-1015 Lausanne

@EPFLcdh
cdh.epfl.ch