Zürcher Hochschule
für Angewandte Wissenschaften

Rektorat

ZHAW digital

Call for Proposals: DIZH Fellowships

First Call, Fall 2019

Contents

*Please note: The English version of this call is for your convenience only. In case of incongruities between the German and the English version, the German version is decisive. However, command of German is **not** required to apply, and the application may be submitted in English.*

1. Introduction

The Canton Council of the Canton of Zurich is considering launching the "Digitalisierungsinitiative der Zürcher Hochschulen" – the "Digitization Initiative of Zurich Universities" – (DIZH) in the beginning of 2020. If approved, 300 MCHF would be distributed over the course of 10 years to strengthen the competitiveness of the Canton of Zurich in the area of digitalization and to connect the research expertise of the University of Zurich (UZH), the ZHAW, the Zurich University of the Arts (ZHdK) and the Zurich University of Teacher Education (PHZH).

This current call is to be understood under the condition of approval of the DIZH by the Canton Council. If, and when, it will be approved can and should not be anticipated. The call is being issued now, in late summer of 2019, in order to be well prepared for the planned start of DIZH in the beginning of 2020.

Within the DIZH research cluster, professors, senior researchers, research associates with a PhD and PhD students of all universities will work on research concerned with digital transformation across universities and disciplines. Each university has their own mode of participating in the research cluster. ZHAW is planning to establish a Fellowship Program ("DIZH Fellows") to sponsor its researchers and to enable their temporary participation in the DIZH research cluster.

Highly qualified researchers, who are already employed at the ZHAW, will receive the opportunity to collaborate with researchers from the other universities on relevant research endeavors within the DIZH research cluster (at its probable location in Zurich). Fellows will be able to contribute and develop their expertise in order to actively shape digital transformation and to create sustainable value for themselves, the DIZH and the ZHAW.

2. Objectives

A Fellowship is meant to provide the opportunity for outstanding researchers of the ZHAW to create visible and lasting impact and to contribute to the integration of the ZHAW and the DIZH research cluster. The following objectives are related to this goal:

- Strengthening Fellows' personal profiles, as well as their dispatching organizational units', due to the competitive selection process (idea of excellence).
- Strengthening the ZHAW's research profile in the area of digital transformation; visibility of the ZHAW in the output of the DIZH research cluster and beyond.
- Strengthening the competencies of and the collaboration within the ZHAW digital Community; scientific connections between the DIZH research cluster and the departments and institutes at the ZHAW.

- Strengthening the impact of applied research on society, organizations and individuals, both nationally and internationally, in the area of digital transformation.

3. Parameters

Who can apply?

The target audience is outstanding researchers of the ZHAW. In principle, ZHAW employees who are…

- Research Assistants as PhD students
- Research Associates with a PhD
- Lectureres, including professors

…can apply for the Fellowship. Thus, the call addresses researchers all the way from PhD students, to experienced researchers, to experienced professors. Permission to apply "sur dossier" is not precluded. During the review and rating of the application – according to the criteria laid out in section 4 – the seniority of the applicant will be considered accordingly.

What does the sponsorship look like?

DIZH Fellowships are sponsorships of the applying person. They do not constitute project sponsorships, which means that material expenses and, especially, more or new positions are not sponsored. The sponsorship consists of covering the respective time that applicants are active as Fellows – according to their pensum – as part of their employment at ZHAW, which means they therefore do not have to perform that pensum as part of R&D or teaching.

What is the possible extent of the Fellowship?

It is possible to apply for any duration between 3 to 24 months with a pensum of between 20 % and 80 %. The remaining pensum is performed within the existing employment and must be at least 20 %.

Example: Someone with a pensum of 80 % can apply for a Fellowship of max. 60 %. The remaining 20 % (at least) are performed within the existing employment at ZHAW. This rule is meant to ensure that Fellows and their research endeavors remain embedded within their home institute and to enable synergies.

Generally, it is expected that junior researchers will apply for a higher pensum and a longer duration (e.g. 60 % for 2 years for PhD candidates; 80 % for 1 year for experienced research associates), while lecturers and professors will apply for a lower pensum and shorter durations (e.g. 40 % for 3-6 months). Deviations are possible.

For the duration of the Fellowships, the sponsored employees reduce their share of planned teaching and other research activities at their home institute accordingly. The institute has to ensure, in particular, that lectures will be covered by other employees. If necessary, qualified

replacements can be arranged and financed through the reduced personnel cost due to the employee sponsorship.

What topics are eligible for sponsorship?

A DIZH Fellowship serves as a personal sponsorship for outstanding researchers at ZHAW with a concrete research endeavor in mind that is to be described as part of the application. In principle, research endeavors that deal with topics that are directly related to relevant questions of digital transformation are eligible for sponsorship, especially (in alphabetical order):

- Building Information Modeling (BIM)
- Cyber Security
- Data Science
- Digital *x*: Digital Health, Digital Business Models, Digital Learning, Digital Ethics, Digital Mobility etc.
- Artificial Intelligence (AI/KI)
- Smart *x*: Smart Cities, Smart Services, Smart Contracts, Smart Factories, Smart Grids etc.
- *x* 4.0: Work 4.0, Society 4.0, Mobility 4.0, Industry 4.0 etc.
- *x*-Tech: MedTech, FinTech, EdTech, GovTech etc.

This is not a conclusive list.

Research endeavors are eligible for sponsorship if they make a substantial contribution to the objectives of the Fellowship (see section 2). This contribution must be made explicit in the application.

Interdisciplinary research endeavors are a plus. Connections with activities of other researchers within the DIZH research cluster (or, during the ramp-up, the involved universities UZH/PHZH/ZHdK) is desirable but not a requirement in this first call.

Where are the Fellows located?

It is expected that the Fellows will be physically located at the location of the DIZH research cluster for their respective pensum; the location will likely be close to the current location of the UZH Digital Society Initiative in Zurich. This is necessary to enable and promote collaboration with other researchers in the cluster and to ensure that the ZHAW plays a visible and active role in all DIZH activities.

4. Selection Criteria

Applications will be evaluated by a Selection Board. It consists of ZHAW-internal and external experts. The following criteria will be applied:

- Excellence of the applicant in applied sciences (40%)
  - Outstanding researchers of all levels are wanted
  - This can be made visible through achievements in R&D that will be evaluated in three subcategories:
    - *Content* (e.g. publications and public talks, patents if applicable, awards, notable professional and academic achievements, etc.)
    - *Management* (e.g. research projects including assumed role and outcomes, funding acquisition, supervised master and PhD students, notable achievements in research management, spin-offs if applicable, etc.)
    - *Networking* (e.g. visibility and contribution to the national and international scientific communities, membership in scientific boards and committees, etc.)
- Excellence of the research endeavor (30%)
  - Ideas that will likely make a visible impact are wanted
  - The following two subcategories will be evaluated:
    - Expected *impact* of the research endeavor in the area of digital transformation (scientifically and in its application); this includes the endeavor's novelty
    - The degree to which the results of the endeavor will become *tangible* as a part of the overall contribution of applied sciences (each application should present its results respectively via deliverables such as publications, demonstrators, videos, presentations, etc.)
- Expected added value for the ZHAW as a player in the digital transformation space (30%)
  - Fellows that will drive the DIZH and ZHAW ecosystems are wanted
  - The following two subcategories will be evaluated:
    - Synergies with research endeavors at the ZHAW ("leveraging"), as well as the ZHAW's strategy, and the added value of the research endeavor for future research activities at the ZHAW in the digital transformation space (e.g. follow-up projects, new working groups or research directions, etc.)
    - Networking and synergies with the DIZH through, for instance, high visibility of ZHAW in the DIZH research cluster as well as collaboration and synergies with other members of the cluster beyond the duration of the fellowship

A successful application must reach a certain threshold in all three categories, which are evaluated based on a 10-point scale in the respective sub-categories. The final ranking is determined by a score that is calculated using the above criteria and their respective weight.

Obviously, the seniority of the applicant (e.g., PhD student vs professor), especially when it comes to scientific achievements (e.g. publications, funds acquired, etc.), will be considered. In

addition, applicants will be evaluated using their respective peer group (same field) for comparison.

5. Procedure

The procedure of this call is as follows:

1. The call opens on 1 September and closes on 31 October 2019, 23:59. The complete application must have been received by ZHAW digital before the deadline.
2. Before the deadline, there is the opportunity to receive individualized coaching by members of the ZHAW digital Core Team (see section 5.1).
3. In a first selection round, the applications will be evaluated by the Selection Board according to the criteria laid out in section 4.
4. The second round consists of interviews with the Selection Board for all the applications that moved on from phase 1 (please make sure to block off your calendar – see section 5.2).
5. The Selection Board makes a ranked list.
6. The ZHAW digital Strategic Council[1] decides up to which rank fellowships will be issued.
7. Applicants will receive feedback by the end of 2019.

Conditional upon the approval of DIZH by the Canton Council, the Fellows will start their Fellowship in the spring of 2019 the earliest, and in the beginning of September 2020 the latest.

5.1. Coaching (optional)

To support potential Fellows with their application, the ZHAW digital Core Team members that are part of the Selection Board are offering one individualized coaching session per applicant. This optional coaching session is meant to ensure that the proposed research endeavor most effectively covers the selection criteria of the Fellowship (see section 4); special emphasis is on the third criterion "Expected added value for the ZHAW as a player in the digital transformation space".

Applicants who are interested in a coaching session should contact ZHAW digital at digital@zhaw.ch one month before the deadline – i.e., by 30 September – to ensure an appointment slot for the session can be found.

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[1] The Strategic Council consists of the board members of the ZHAW and the co-leadership of ZHAW digital.

5.2. Timeline

	What?	Who?	When?
Application phase	Application opens	Applicant	1 September 2019
	Coaching (optional)	Applicant with a member of the ZHAW digital Core Team	1 September – 30 October 2019 (deadline for appointment: 30 September)
	Application closes	Applicant	31 October 2019
Selection phase	Selection phase 1 (evaluation)	Selection Board (internal and external Experts)	1 – 21 November 2019
	Selection phase 2 (interviews – please block calendar)	Selection Board with successful applicants from first round	25 – 27 November 2019
Decision phase	Creating finalized ranking list	Selection Board	Beginning of December 2019
	Determination of the cut-off point or rejection of the list altogether	ZHAW digital Strategic Council	December 2019
	Feedback to applicants about results	ZHAW digital Strategic Council	December 2019
Fellowship Start	Start of the first Fellowships	Successful DIZH Fellow applicants	Spring semester 2020 onward (conditional)

6. Application

The complete Fellowship application consists of the following elements (see explanations below):

1. Completed application form including research proposal (see template in section 7)
2. Scientific CV (max. 2 pages)
3. Letter of recommendation (max. 2 pages)
4. Attachments
   4.1. List of publications and patents
   4.2. List of public talks (incl. classification as national/international/keynote)
   4.3. List of acquired projects and funding (incl. name, duration, funding amount, funder such as Innosuisse/KTI/SNF/EU etc., role in project)

4.4. One artefact of choice to support the quality of own work (e.g. publication, open source software such as code-repository etc., feedback received, etc.)

Explanations for each application document:

CV:

Aside from the usual information about the applicant's academic and professional career, the CV should contain information about possible startups/spinoffs, awards, number of supervised students from master level up, appointments within the subject's research community, memberships in committees etc., as well as other notable achievements during the applicant's studies and/or career.

Letter of recommendation:

The letter of recommendation is written and signed by the supervisor and the director of the institute where the applicant is employed. It addresses the applicant's professional quality, the connection between the proposed research endeavor and the R&D-strategy of the institute, and the possibilities to integrate or make permanent the research after the end of the Fellowship.

Research proposal:

The research proposal describes the research endeavor and, in particular, takes into account its subject-excellence, the potential impact of its results (which may require statements about feasibility, relevancy and novelty), its potential to be tied to other research within the DIZH research cluster (or, during the ramp-up, the involved universities UZH/PHZH/ZHdK), as well as how it can connect to the strategy and research of the dispatching organizational unit at ZHAW. In addition, it expounds on how the Fellowship will generate sustainable added value for the DIZH research cluster and the ZHAW digital Community. This last aspect can be shaped during an optional coaching session with members of the ZHAW digital Core Team (see section 5.1).

6.1. Submission

The completed application documents (sans letter of recommendation) have to be submitted electronically as a single PDF (including signatures of the superiors up to, and including, department directors) to digital@zhaw.ch (with line organization superiors of the department in CC). Formal violations against length- or time-allowances will lead to an automatic exclusion from consideration.

The letter of recommendation has to be sent by the superior to digital@zhaw.ch (with line organization superiors of the department in CC) directly (i.e. separate from the other documents) before the application deadline.

7. Application Form

ZHAW	Application DIZH-Fellowship	First Call, Fall 2019
Attention: • Please complete this form in its entirety and observe any character count limits • The completed application consists of this form and the documents listed in section 6 (scientific CV, letter of recommendation to be handed in separately, attachments) • Submit the application electronically (see section 6.1) • Submission deadline: 31 October 2019, 23:59.		
Research endeavor title		
Research endeavor abstract (max. 300 characters including spaces)		
Applicant's name		
Academic degrees		
Date of birth		
ZHAW short user name		
Phone number		
Employment type (WiAss, WiMa, Dozierende/r)		
Employment factor in %		
Role at the ZHAW		
Institute / center		
Department		
Desired duration of fellowship (in months, 3-24 months possible)		
Desired pensum of fellowship (20-80 % are possible, but not more than 20 points below the current employment factor)		
Desired start date (earliest: 01.02.2020, latest: 01.09.2020)		
Application questions		
1. Why are you among the outstanding researchers at ZHAW? (max. 1,000 characters including spaces; refer to CV and attachments for proof/details)		

2. What is the research endeavor's connection to and impact on digital transformation, especially within the context of applied research? (max. 1,000 characters including spaces)
3. What will the results at the end of the Fellowship be (e.g. scientific result/publication, pilot, etc.)? (max. 1,000 characters including white spaces)
4. How will this result become tangible (e.g. scientific publication, video-documentation, demonstrator, etc.) and for which target audience(s) (e.g. scientific community, general public, industry)? (max. 1,000 characters including spaces)
5. What else will happen with the result of the Fellowship? What are the plans to further pursue the resulting achievements at the ZHAW? (max. 1,000 characters including spaces)
6. Are there possible points of connection for collaborating with other members of the DIZH research cluster (or other researchers at UZH/PHZH/ZHdK)? (max. 1,000 characters including spaces)

Research proposal (max. 5,000 characters including spaces)

Formal check (confirmed with signature below; condition of sponsorship is a "yes" in each)

Letter of recommendation of supervisor has been submitted separately	yes / no
I can arrange for an appointment for an interview if I make it to the second round (25 – 27 November during business hours)	yes / no
I would start an awarded Fellowship by 1 September 2020 at the latest	yes / no
I would work at the DIZH location in Zurich for the awarded Fellowship pensum	yes / no

Date and Signature (digitally or scanned)

Applicant	
Superior	
Head of institute/center	
Additional line managers	
Head of department	

8. Contact

In case of any questions regarding this call or in case of interest with receiving application coaching (see section 5.1), please contact:

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E-Mail: digital@zhaw.ch

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