# PERSPECTIVES.13

Personnel policy at ETH Zurich



### Contents

### Feature articles

On using freedoms	4-5
Transparency and control	6-7
Autonomy – desired and won	8-9
Providing services as an equal	10 – 11
Facts & figures	12-13
Age structure	14
Nationality	15
Types of employment	16
Salary basis	17
Part-time employment	17
Employee development 2003–2012	18-21
The world of ETH Zurich, 31.12.2012	22-23
Europe at ETH Zurich, 31.12.2012	24-25
Staff turnover	26
Imprint / Contact / Further information	27



### Perspectives on independence

We have now been publishing Perspectives for ten years. We have taken this opportunity to consider the events during this period. How has ETH Zurich developed? What decisive changes has the institution undergone? And how do they affect the university today? We want to get underway, retrace our steps and try to understand how we got to where we are now.

The images in Perspectives.13 were also gathered «underway». Taken between ETH Zentrum and Hönggerberg on the Science City Shuttle, they stand for a university on the move.

The four feature articles, which cast a look at previous years, have a common theme: autonomy. With the entry into forces of the revised ETH Law in January 2004 ETH Zurich achieved a new level of independence. We illuminate this challenge from various perspec-

tives: that of the Executive Board as decision-making body; that of financial planning and steering; that of the departments; and finally that of Human Resources. They show us the journeys embarked upon: never truly ending, but with examples to point the way.

The breakthrough achieved by this university with its new freedoms demands all of our energies, and constant dialogue. It continues to require a culture of mutual trust, and a culture of enablement. Maintaining these requires constant attention from us all; here personal responsibility and awareness at and regarding ETH are decisive. This was clear in every discussion we had on this year's Perspectives.

We wish you a stimulating read, and look forward to your comments on Perspectives.13 (please send these to us at perspektiven@hr.ethz.ch).

Dr. Martina Schallamon Personnel and Organisational Development



### On using freedoms

With the revised ETH Law ETH Zurich achieved autonomy in its articles of association – a new level of legal independence which ensures the flexibility the institution needs to address complex developments.

"We could always make our own decisions," says Hugo Bretscher, General Secretary of ETH Zurich. "But autonomy in articles of association in organisational matters has given us much more room to manoeuvre." A very few areas excepted, ETH Zurich can now determine its own institutional structure.

#### Independence in fact

Independence is in itself nothing new for ETH Zurich. Even before the entry into force of the revised ETH Law in January 2004, the institution's scope of competence was wide. Traditionally the ETH President had a great influence on strategy and was responsible for hiring faculty. The Executive Board and President were thus already substantially involved with determining the institution's focus.

### Legal room to manoeuvre

With the revised ETH Law of ten years ago ETH Zurich then achieved autonomy in its articles of association. Since that time the institution has been able to decide on its own whether, for example, it will follow a departmental system or should establish a system of schools led by deans. ETH in fact made a conscious decision to opt for a flexible departmental structure, with Heads of Department actively engaged in scientific endeavours. The departments were also granted partial autonomy, e.g. in how funding is distributed among chairs.

### Interdependence at management level

The central organ of ETH Zurich is the President. He or she has numerous overarching rights and authority, but formally many threads also come together in his/her office: no president will be successful who acts without consulting the professors. The ETH Zurich management structure - characteristic of the institution – thus combines a distinctive presidential system with a well-established institutional system of participative cooperation between the executive, the departments and the professors. This requires great tact, because such cooperation (as opposed to a 'guaranteed role in decision-making') demands self-imposed commitment.

#### **Applied culture of participation**

One expression of the culture of participative cooperation is today's well-established strategy, planning and budget process. Every spring the Executive Board meets with each of the 16 departments to discuss the achievements of the previous year, the outlook for the future and desired and necessary developments. On the basis of these the Executive Board holds a conclave at the beginning of the summer to set strategic guidelines, consider the financial framework and share thoughts on academic chairs. The creation of new chairs and budget discussions with the departments follow, completing this recurring process.



#### Versatile into the future

How far ETH Zurich's current structure and organisation really equip the institution to address future challenges remains to be seen. However, scientific progress is certainly moving forward, particularly in intersecting disciplinary areas. The departmental structure is not ideal for deploying interdisciplinarity, but has still shown itself to be thoroughly capable of development and flexibility, even when acting in combination with overarching centres of excellence. This is a good foundation for potential structural changes, which are both independently determined and rapid.

This contribution is based on a discussion in March 2013 between Hugo Bretscher, General Secretary of ETH Zurich, and Martina Schallamon, Personnel and Organisational Development.



### Transparency and control

Agreement on objectives, global budget, statement of accounts, finance regulations, effectiveness of internal controls, risk management, controlling: all of these ultimately serve the achievement of academic goals.

Finance and Controlling has been represented on the Executive Board since 2008. At the time this was revolutionary, but it ultimately reflects how important this unit has become.



Since the time ETH Zurich became an independent legal unity many processes and instruments in aid of its financial steering and control have been developed and introduced. Dr. Robert Perich, Vice President Finanzen und Controlling, recalls the lack of transpar-

ency and paucity of professional steering instruments in the period before he joined ETH Zurich. It was necessary to build a new institutional understanding of management: "We have a long, successful journey behind us."



#### Institutional action

ETH Zurich's far-reaching institutional independence process was accompanied by several internal possibilities and reforms. First among them was delegation of budget management to the departments and chairs. To help them carry out this task, the new Finance and Control unit established in 2003 equipped those responsible with modern administrative management tools, information and support. Since 2004 every department head has been assisted by a professional departmental controller. Naturally, budget processes also receive support. Here ETH's ETHIS platform is a fundamental, factoriented aid.

#### Francs instead of jobs

A paradigm change also took place in the area of personnel management. Previously manpower requirements were calculated and planned in numbers of positions. Application for these was made to the Swiss Personnel Office (EPA), who then allocated the respective quota. Today every chair administers its own budget, in francs. The number of staff dividing it is determined by the chair and the department themselves.

#### Finance regulations as indicator

Another milestone was the introduction of the Financial Regulations in 2005. This document, which quickly proved itself as a valuable guideline for responsible handling of ETH Zurich funds, regulates the respective tasks, competences and areas of responsibility in a consistent and role-appropriate manner.

#### Satisfy all interest groups

The federal government and private donors provide ETH Zurich and individual research groups with substantial funding. In view of the university's financial sponsorship responsibilities, financial accountability is therefore more or less comprehensive. Today's economic and social environment also requires instruments such as an internal control system or an extensive risk management system. These secure legitimation and provide proof of 'good practice' in the handling of funding entrusted to the institution.

### A culture of enablement

ETH Zurich has grown substantially over the last few years. It has also become more international. These developments will continue. In this context Finance and Controlling is striving to elaborate its well-regulated financial management system. As first priority, this system facilitates and supports the achievement of academic goals; at the same time it ensures unfailing credibility in the eyes of ETH's various sponsors. This culture will be perpetuated into the future and further developed: its keywords are personal responsibility, transparency and a culture of enablement.

This contribution is based on a discussion in March 2013 between Dr. Robert Perich, Vice President Finance and Controlling, ETH Zurich, and Martina Schallamon, Personnel and Organisational Development.

### Autonomy – ventured and won

Overarching management tasks at the levels of department, institute and chair demand additional dedication. Ultimately this serves the interests of teaching and research.

Research and teaching are, and will remain, the central tasks of departments. Other tasks, such as strategy, personnel and budget matters, were secondary at this level until the concept of autonomy established itself at ETH Zurich. According to Prof. Dr. Gianni Blatter, Head of the ETH Zurich Department of Physics, the turning to autonomy, with the far-reaching operational independence it signifies for teaching and research, has been the most formative change in the last few years.

#### **Departmental accountability**

Many decisions that were earlier made alone by the ETH Zurich President now involve the departments. In the Department of Physics the Head of Department and a committee are responsible: the latter is composed of representatives of the institutes, scientific staff, students and technical/ administrative staff in equal parts. This body determines budget and funding allocations to the individual institutes and operations, and distributes teaching tasks. Its discussions are correspondingly intense. In addition to the committee, in the Department of Physics the departmental conference and the conference of professors concern themselves with important areas, in particular research strategy, the organization of degree programmes, promotions, and honorary doctorates.

#### **Varied approaches**

Decision-making is handled differently among departments. As is autonomy. In the Department of Physics the strived-for discussion culture is demanding for everyone, as it requires the development of a personal approach to shifting boundaries and few rules, and great personal responsibility. New professors coming from outside experience this particularly keenly. Some, especially at the beginning, would rather see a strong president intervene. However, the advantage of today's procedure is obvious: decisions made by the department now have broad departmental support.

#### Co-design of strategic direction

Today a department may be much more active in changing its orientation. It also has more influence on the staffing of chairs. The Department of Physics draws up a profile document for each chair that includes its desired teaching and research area, and elaborates a proposal for the ETH President regarding how the chair should be organised and equipped. This means nothing other than that the department must agree on what will happen in the future. The final decision, however, is always made by the President, who has overall responsibility.

Autonomy, ultimately, also means transparency (although confidentiality should also be respected). Today those in the department know basically which institutes have what funding, and how the teaching load is distributed.



Making decisions as an independent department is a constant challenge. This partial operational autonomy has changed ETH dynamics.



### **Department Heads as pilots**

In decision-making the Head of Department has a significant responsibility: careful preparation of matters to be addressed. If he/she succeeds in accommodating competing interests

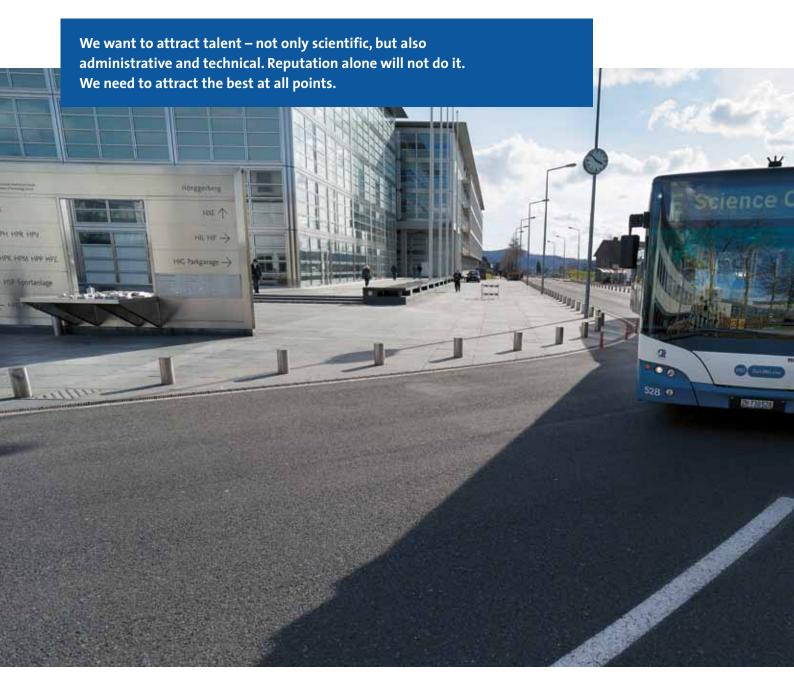
in this phase, efficient decisions can be made, unnecessary conflicts can be avoided, and room can be created for what is important: research and teaching. This contribution is based on a discussion in March 2013 between Prof. Dr. Gianni Blatter, Head of the ETH Zurich Department of Physics, and Martina Schallamon, Personnel and Organisational Development.

### Providing services as an equal

ETH's new autonomy changed the role of Human Resources decisively. What was a purely administrative personnel department has become a provider of customised, comprehensive HR services.

The thorough renewal, which ETH Zurich Human Resources (HR) has undergone in the last ten years, could only unfold via the autonomy won with the revised ETH Law and the revised laws on federal personnel and pensions. These fundamentally changed the scope of competence – and the respon-

sibility – of ETH Zurich as an employer. A salary administration system was introduced, and streamlined personnel regulations governing employment conditions replaced thick binders full of highly detailed personnel law stipulations.



Modern employment contracts replaced mandatory decrees on terms of employment, and today ETH also has nearly full control of salary policy. The time-consuming positions management system was dismantled and replaced by financial management on the part of departments themselves.

This was accompanied by a decisive increase in the management responsibilities of superiors. Shortly after the introduction of this system a professor said, "Everything was better before! If my secretary wanted a raise but I thought she already earned enough, I would still tell her to make an application to the personnel department, and would also sign it. When the application was refused we could complain about the mean administration together. That doesn't work any more."

#### **Individuality and automation**

Institutional room to manoeuvre fundamentally changes the role of HR. What was formerly a purely administrative interface between ETH Zurich and the federal government is now a modern provider of services. Professional consultants guide the entire personnel process. Numerous support systems and improved electronic aids are available. These changes have enabled ETH Zurich to manage growth and deploy resources for employee services and personnel development without increasing funding.

#### **Attractive employer**

ETH Zurich has an outstanding reputation both nationally and internationally. It attracts the best talent. HR contributes to this with specific services. For example, scientists receive much more career support than previously. Many events are held in this context, e.g. in the Career Center with its links to business. This area will grow in the near future. ETH's infrastructure domain offers a growing number of activities, flexible working hours and high levels of independence.

### Management competence as a core task

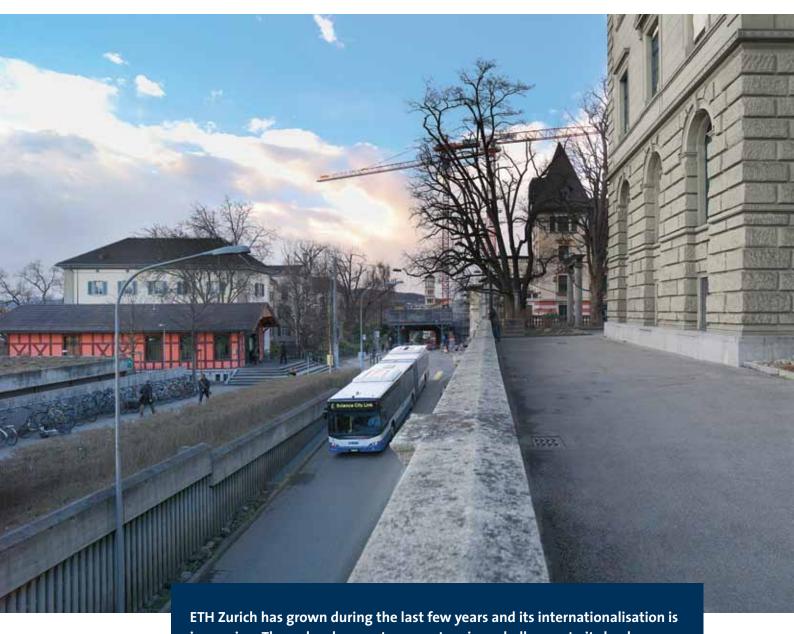
With autonomy the significance of management increased at all levels. Establishing a new management culture was and remains an important task for ETH's leaders. The management training courses and coaching of HR contribute greatly to this effort. The most important engine of change in this context has been the introduction of the new salary system and its accompanying management policy. Here the duty to conduct eye-to-eye appraisal interviews to discuss achievements and goals will stimulate the growth of the desired management culture.

#### Accessible in every way

The university is growing, and with this the demands on HR. Above all, increasing internationalization will require us to make further adjustments. For the heads of departmental personnel getting the best talent, with an eye to diversity, will remain primary. In infrastructure domains, access to HR services will be made more low-threshold. Personnel activities will also continue to be decentralized.

This contribution is based on a discussion in March 2013 between Piero Cereghetti, Director, ETH Zurich Human Resources; Dagmar Doege, Head of personnel consulting for the Executive Board and infrastructure domains; and Martina Schallamon, Personnel and Organisational Development.





increasing. These developments present various challenges to its leaders.

### Facts & figures

### A look at personnel structure



The following pages comprise a selected overview of the personnel situation at ETH Zurich (as of 31.12.2012).

We also present selected figures and comparisons regarding developments in human resources over the last ten years.

Kurt Zurbuchen HR Controlling

<sup>→</sup> Further issues of Perspectives may be accessed under 'Legal/Reports/Info' or at www.hr.ethz.ch/rechtliches/2330\_an\_broschueren/PERSpektiven

## Age structure

Despite growth, the average age of ETH staff remained constant.

	Up to 20	21-35	36-50	51-65	Over 65	Total	Ø Age
ETH total	233	6 3 3 1	2330	1321	27	10 242	35
Men	147	4 279	1441	871	24	6762	35
Women	86	2 0 5 2	889	450	3	3 480	35
Percentage women	37%	32%	38%	34%	11%	34%	

	Up to 20	21-35	36-50	51-65	Over 65	Total	Ø Age
Professors	0	4	185	189	2	380	51
Men	0	4	166	174	2	346	51
Women	0	0	19	15	0	34	49
Percentage women		0%	10 %	8%	0%	9%	
Assistant Professors	0	40	43	0	0	83	36
Men	0	28	31	0	0	59	36
Women	0	12	12	0	0	24	36
Percentage women		30%	28%			29 %	
Assistants	2	4 2 5 9	347	11	1	4620	29
Men	0	2976	226	6	1	3 209	29
Women	2	1283	121	5	0	1411	30
Percentage women	100%	30%	35%	45 %	0%	31%	
Senior assistants	0	137	269	28	1	435	39
Men	0	106	199	23	1	329	39
Women	0	31	70	5	0	106	39
Percentage women		23 %	26%	18 %	0%	24%	
Scientific staff	0	52	137	46	10	245	44
Men	0	35	94	34	10	173	45
Women	0	17	43	12	0	72	42
Percentage women		33%	31%	26%	0%	29 %	
Senior scientists and scientific							
staff on permanent contracts	0	4	92	161	5	262	53
Men	0	4	75	144	5	228	54
Women	0	0	17	17	0	34	52
Percentage women		0%	18 %	11 %	0%	13 %	
Scientific staff on hourly wages	49	1146	7	0	0	1202	24
Men	31	791	6	0	0	828	24
Women	18	355	1	0	0	374	24
Percentage women	37%	31%	14 %			31%	
Technical and IT staff	133	349	617	454	5	1558	42
Men	101	252	476	368	4	1201	43
Women	32	97	141	86	1	357	41
Percentage women	24%	28 %	23 %	19 %	20%	23 %	
Administrative staff	49	340	633	432	3	1457	44
Men	15	83	168	122	1	389	44
Women	34	257	465	310	2	1068	43
Percentage women	69%	76%	73 %	72%	67%	73 %	

<sup>ightarrow</sup> 92 staff members retired in 2012.

### Nationality

The proportion of foreign staff at ETH Zurich has grown by 14% in the last 10 years.

	Switzerland	Abroad	Count	Country of origin		
					Rest of	Rest of
	2012	2012	Total	Germany	EU	the world
ETH total	5082	5160	50%	40%	34%	26%
Professors	129	251	66%	45%	37%	18 %
Assistant Professors	20	63	76%	30%	38%	32%
Assistants	1387	3 233	70 %	36%	34%	30%
Senior assistants	146	289	66%	47%	31%	22%
Scientific staff	103	142	58%	42%	35%	23 %
Senior scientists and scientific						
staff on permanent contracts	155	107	41%	50%	31%	19 %
Scientific staff on hourly wages	775	427	36%	52%	27%	21%
Technical and IT staff	1170	388	25%	41%	40 %	19 %
Administrative staff	1197	260	18 %	60%	30%	11%

	Switzerland	Abroad	Count	ry of origin		
					Rest of	Rest of
	2012	2012	Total	Germany	EU	the world
Architecture	409	342	46%	54%	28%	18 %
Civil, Environmental and Geomatic Engineering	367	338	48 %	40%	38%	22%
Mechanical and Process Engineering	382	452	54%	37%	30%	33%
Information Technology and Electrical Engineering	260	372	59 %	38%	34%	28%
Computer Science	125	243	66%	30%	38%	32%
Materials Science	96	154	62%	30%	36%	34%
Biosystems Science and Engineering	48	174	78 %	40%	26%	34%
Mathematics	113	164	59%	36%	40%	24%
Physics	295	362	55 %	36%	41%	22%
Chemistry and Applied Biosciences	385	552	59%	35%	37%	28%
Biology	247	469	66%	40%	33%	27%
Earth Sciences	157	191	55 %	32%	39%	28%
Environmental Systems Science	436	334	43 %	49%	24%	26%
Health Sciences and Technology	265	242	48%	35%	36%	29%
Management, Technology and Economics	137	250	65%	44%	28%	28%
Humanities, Social and Political Sciences	174	189	52%	63 %	21%	16%
Finance and Controlling	66	13	16%	62%	8%	31%
Corporate Communications	21	10	32%	60%	10 %	30%
Rectorate	71	10	12 %	60%	30%	10 %
ETH Library	261	58	18 %	62%	28%	10 %
IT Services	192	36	16 %	61%	22%	17%
Human Resources and Services	109	17	13 %	29%	47%	24%
Real Estate and Facility Management	204	62	23 %	13 %	76 %	11 %

 $<sup>\</sup>rightarrow$  Two-thirds of professors come from abroad.

### Types of employment

The ETH workforce grew by 0.5% in 2012 and the number of FTE grew by 2.1%. This means that personnel utilisation is higher than in 2011.

		Change from previous year		Change from previous year		Change from previous year	FTE* 2012
ETH total	2728	-0.5 %	7514	0.9%	10 242	0.5%	7661.9
Professors	380	4.7%			380	4.4%	369.3
Assistant Professors			83	9.2%	83	6.4%	80.1
Assistants			4620	2.0%	4 620	2.0 %	3 678.1
Senior assistants			435	9.0%	435	5.6%	368.3
Scientific staff			245	2.5%	245	-0.4%	174.8
Senior scientists and scientific staff on permanent contracts	253	0.8%	9	-62.5%	262	-4.7%	240.4
Scientific staff on hourly wages			1202	-3.1%	1202	-3.1%	290.9
Technical and IT staff	1047	-2.3 %	511	2.6%	1558	-0.8 %	1373.2
Administrative staff	1048	1.6 %	409	-7.5 %	1457	-1.2 %	1086.8

<sup>\*</sup> Full Time Equivalent

P		Change from previous year		Change from previous year		Change from previous year	FTE* 2012
Architecture	101	3.1%	650	-0.9 %	751	-0.4%	402.9
Civil, Environmental and							
Geomatic Engineering	149	3.5%	556	7.1%	705	6.3 %	520.4
Mechanical and Process Engineering	95	2.2%	739	7.9 %	834	7.2 %	592.0
Information Technology and Electrical Engineering	100	-1.0 %	532	1.5%	632	1.1%	509.0
Computer Science	61	-6.2%	307	-5.8 %	368	-5.9 %	329.7
Materials Science	59	-1.7 %	191	2.1%	250	1.2 %	187.7
Biosystems Science and Engineering	27	-6.9 %	195	29.1%	222	23.3 %	192.9
Mathematics	77	1.3 %	200	0.5%	277	0.7%	230.8
Physics	166	1.8 %	491	-0.2%	657	0.3 %	557.3
Chemistry and Applied Biosciences	210	-0.9 %	727	-4.0%	937	-3.3 %	690.2
Biology	128	-5.9 %	588	-4.4%	716	-4.7%	558.7
Earth Sciences	82	6.5 %	266	1.5 %	348	2.7%	241.4
Environmental Systems Science	172	0.0%	598	2.4%	770	1.9 %	522.3
Health Sciences and Technology	74	7.2 %	433	11.6 %	507	10.9 %	351.0
Management, Technology and Econor	nics 52	-8.8%	335	-1.2 %	387	-2.3 %	263.0
Humanities, Social and Political Science	ces 50	13.6%	313	-2.5 %	363	-0.5 %	229.0
Finance and Controlling	64	-1.5 %	15	7.1%	79	0.0 %	70.8
Corporate Communications	28	0.0%	3	-25.0 %	31	-3.1%	23.9
Rectorate	72	1.4%	9	-10.0 %	81	0.0 %	62.3
ETH Library	189	-1.6 %	130	10.2 %	319	2.9 %	212.3
IT Services	200	3.1%	28	-37.8 %	228	-4.6%	205.8
Human Resources and Services	94	-3.1%	32	18.5 %	126	1.6 %	105.3
Real Estate and Facility Management	256	-4.8 %	10	-9.1%	266	-5.0 %	239.2

<sup>\*</sup> Full Time Equivalent

 $<sup>\</sup>rightarrow$  In 2012 20,305 contracts and contract changes were issued.

### Salary basis\*

In 2012 9.9% more women were in the highest salary class than in 2011.

	to CHF	60000	to CHF	100 000	to CHF	140 000	over CHF	140 000
	Total	Men	Total	Men	Total	Men	Total	Men
ETH total	309	63%	5 682	64%	1816	63%	1037	84%
Professors	0		0		0		380	91%
Assistant Professors	0		0		0		83	71%
Assistants	96	67%	4490	70%	19	63%	3	100%
Senior assistants	0		46	67%	368	76 %	21	81%
Scientific staff	2	100 %	36	44%	175	71%	27	93%
Senior scientists and scientific								
staff on permanent contracts	0		0		43	81%	215	88%
Technical and IT staff	157	72%	587	63%	656	88%	114	97%
Administrative staff	54	31%	523	15 %	555	23 %	194	63 %

<sup>\*</sup> Gross salary (100%), including apprentices and interns but not staff on hourly wages

### Part-time employment

The number of part-time ETH staff was around 1% less than in 2011.

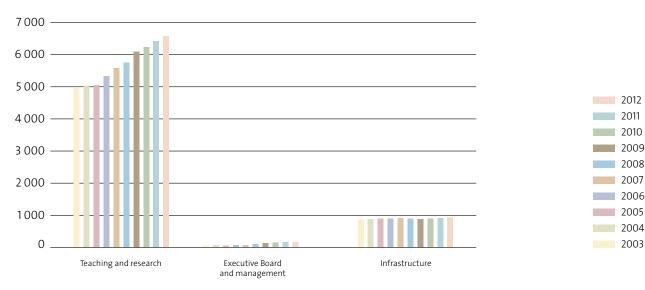
			Part-tim	e staff	Percentage worked		
	Total	Men	Total	Men	up to 50%	51%-80%	81%-99%
ETH Total	10 242	66%	5 6 9 3	56%	39%	56%	5%
Professors	380	91%	24	88%	63 %	33%	4%
Assistant Professors	83	71%	6	67%	67%	33%	
Assistants	4 620	69%	2 655	62%	12 %	82%	5%
Senior assistants	435	76%	156	66%	43 %	51%	6%
Scientific staff	245	71%	145	63 %	57%	36%	8%
Senior scientists and scientific							
staff on permanent contracts	262	87%	56	70 %	36%	52%	13 %
Scientific staff on hourly wages	1202	69%	1197	69%	100%		
Technical and IT staff	1558	77%	487	59 %	33%	59%	9%
Administrative staff	1457	27%	967	18 %	35%	56%	9%

 $<sup>\</sup>rightarrow$  56 % of part-time employees – 2 % more than in 2011 – work between 51 % and 80 %.

### Employee development 2003 – 2012

### Structural development 2003 - 2012





2011

2010 2009

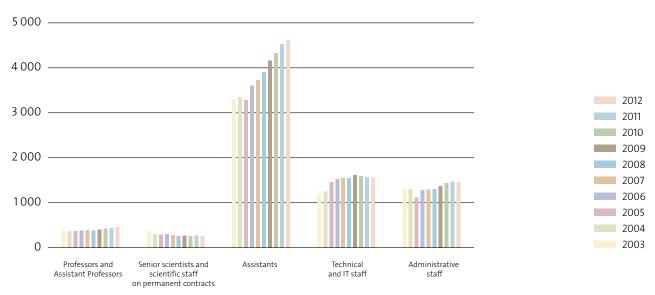
2008 2007

2006

	2003	2012	Change
Teaching and research	4963	6 572	32.4 %
Executive Board and management	59	171	189.8 %
Infrastructure	869	919	5.8 %

### Workforce development 2003 - 2012

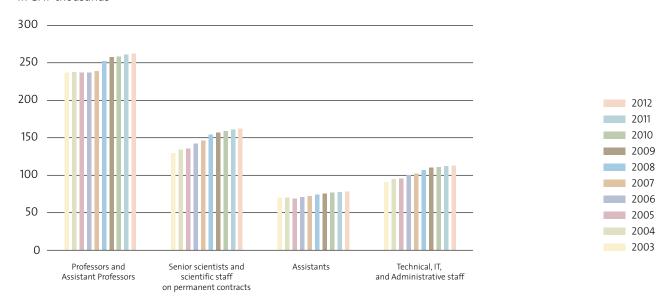
Head count



	2003	2012	Change
Professors and Assistant Professors	371	463	24.8%
Senior scientists and scientific staff on permanent contracts	367	262	-28.6%
Assistants	3 3 0 9	4 620	39.6%
Technical and IT staff	1205	1558	29.3%
Administrative staff	1320	1457	10.4%

### Development of average salary costs 2003-2012

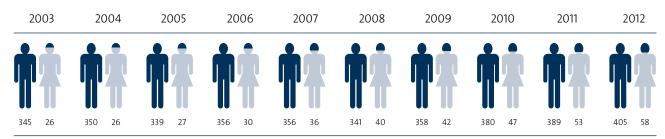
In CHF thousands



	2003	2012	Change
Professors and Assistant Professors	236999	262154	10.6 %
Senior scientists and scientific staff on permanent contracts	129 586	162 034	25.0 %
Assistants	70106	78 457	11.9 %
Technical, IT, and Administrative staff	91118	112 994	24.0 %

### Development in proportion of female Professors and Assistants 2003 – 2012

### **Professors and Assistant Professors**



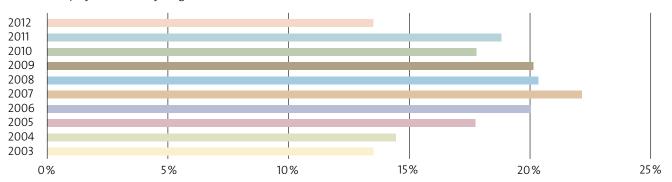
### **Assistants**

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
77	Ť	††	<b>†</b>		11		<b>†</b>	***	***
2 411 898	2 424 929	2 382 905	2566 1043	2 630 1099	2 724 1183	2 906 1 256	3 006 1325	3 144 1 386	3 209 1 411

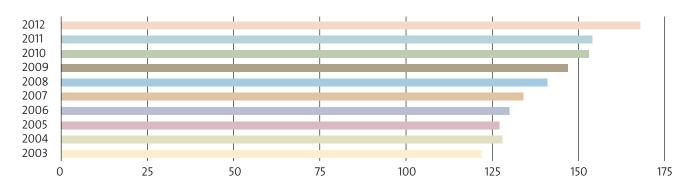
### Employee development 2003 – 2012

### Development of fixed-term contracts in technical and administrative areas, 2003 — 2012

without employees on hourly wages



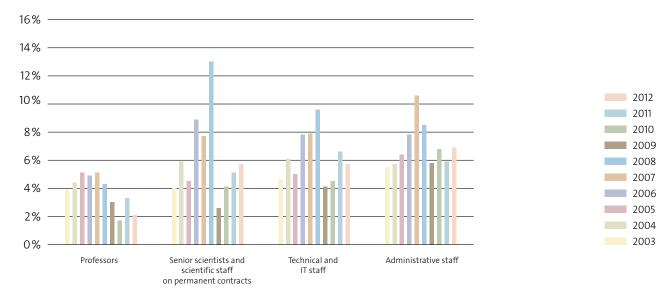
### Development of apprentices, 2003 – 2012



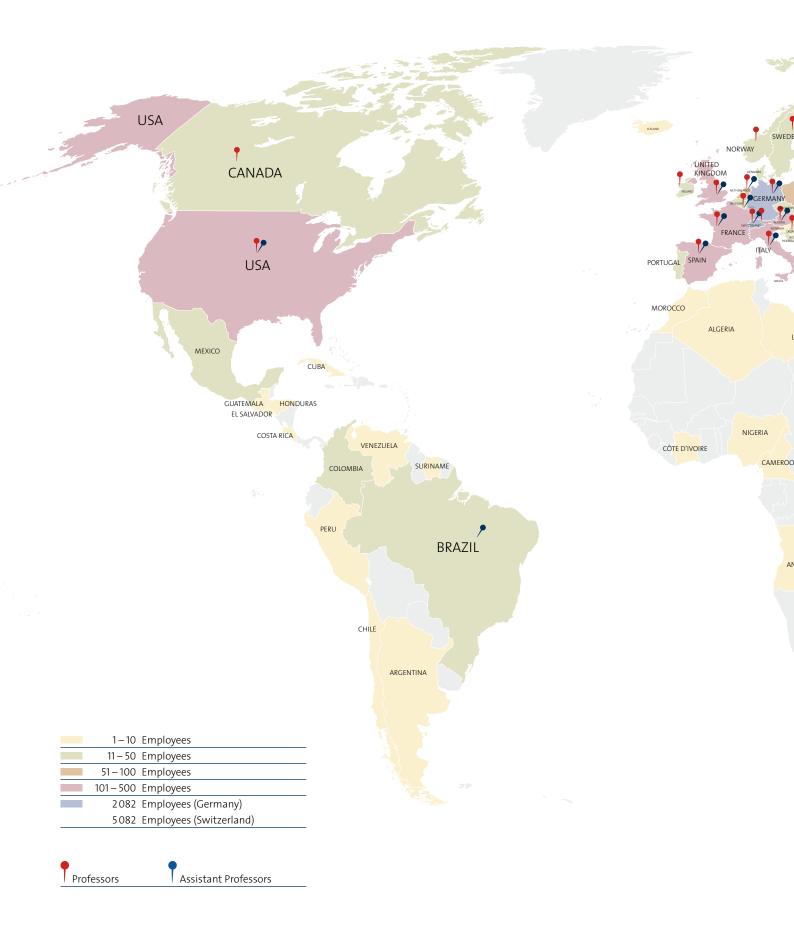
Career opportunities for apprentices	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total	122	128	127	130	134	141	147	153	154	168
Laboratory technician EFZ Chemistry	17	18	16	17	18	17	15	17	15	17
Laboratory technician EFZ Biology	18	19	22	23	23	25	26	24	24	27
Physics laboratory technician EFZ	16	16	15	16	16	19	18	19	19	18
Polymechanic EFZ	17	17	15	16	15	16	16	16	16	16
Elektronic technician EFZ	14	15	15	16	18	17	18	17	20	21
Informatic technician EFZ	7	7	6	9	12	11	13	12	13	15
Draughtsperson EFZ	1	1	1	1	1	2	2	2	2	2
Forester EFZ	4	4	4	3	3	2	3	3	1	
Administrative personnel EFZ*	13	12	14	12	15	13	16	18	16	21
I&D personnel EFZ	10	13	14	10	7	10	10	11	13	13
Building manager EFZ	4	4	3	5	4	5	4	5	4	5
Mediamatics technician EFZ	1	2	2	2	2	1	2	2	3	4
Building manager EFZ						2	4	5	5	5
Animal care worker EFZ						1		1	2	2
Print technician reprography								1	1	2

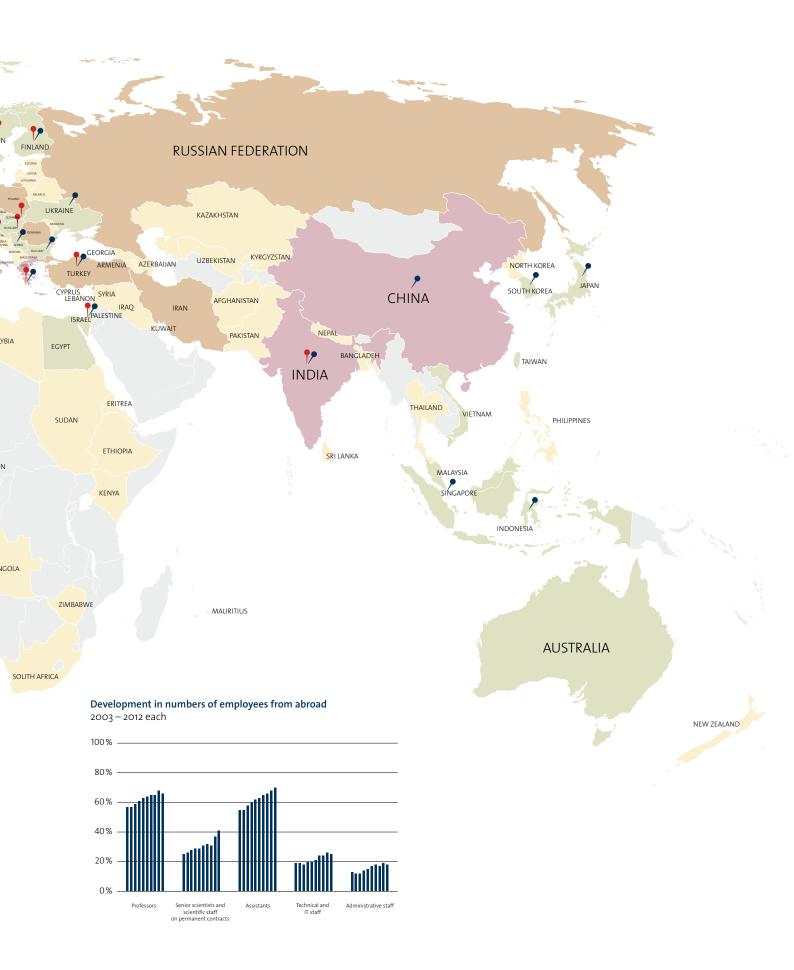
 $<sup>^{</sup>st}$  including ETH Board and ASVZ

**Turnover development 2003 – 2012** not including expiry of fixed-term contracts



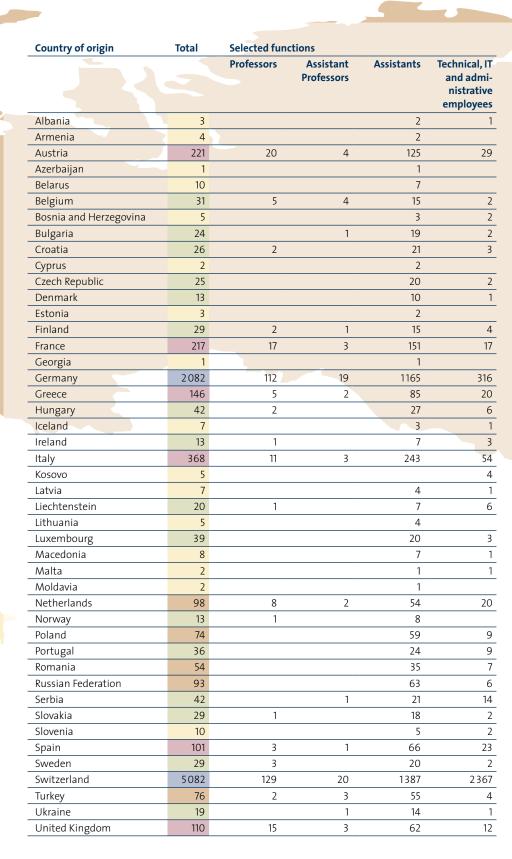
### The world of ETH Zurich, 31.12.2012





### Europe at ETH Zurich, 31.12.2012





**RUSSIAN FEDERATION** 

GEORGIA

ARMENIA

AZERBAIJAN

TURKEY

CYPRUS

### Staff turnover

### The rate of staff turnover increased by 0.4% from the previous year

	Entries from outside	Persons leaving				No. of employees	Turnover in %***
		Total*	Contract expired	Notice given**	Retire- ment		
ETH total	4 2 3 5	3999	3 3 0 8	580	92	10 242	6.6%
Professors	24	9	1	0	8	380	2.1%
Assistant Professors	13	5	2	3	0	83	3.6%
Assistants	1436	1209	875	326	0	4620	7.1%
Senior assistants	34	68	39	26	1	435	6.2%
Scientific staff	46	62	42	20	0	245	8.2%
Senior scientists and scientific							
staff on permanent contracts	4	17	2	2	13	262	5.7%
Scientific staff on hourly wages	2144	2108	2024	83	0	1202	6.9 %
Technical and IT staff	235	217	124	48	41	1558	5.7%
Administrative staff	299	304	199	72	29	1457	6.9 %

	Entries from outside	Person leaving	-			No. of employees	Turnover in%***
			Contract	Notice	Retire-		
		Total*	expired	given**	ment		
Architecture	297	296	246	47	3	751	6.7%
Civil, Environmental and							
Geomatic Engineering	320	267	230	32	5	705	5.2 %
Mechanical and Process Engineering	567	533	488	42	2	834	5.3 %
Information Technology and							
Electrical Engineering	287	256	219	35	1	632	5.7%
Computer Science	243	252	215	35	0	368	9.5%
Materials Science	89	90	69	19	2	250	8.4%
Biosystems Science and Engineering	83	47	34	13	0	222	5.9 %
Mathematics	426	425	402	21	1	277	7.9 %
Physics	178	152	115	31	4	657	5.3 %
Chemistry and Applied Biosciences	329	313	245	56	10	937	7.0 %
Biology	171	179	125	51	3	716	7.5 %
Earth Sciences	107	90	80	8	2	348	2.9 %
Environmental Systems Science	362	342	292	42	5	770	6.1%
Health Sciences and Technology	231	213	184	26	3	507	5.7%
Management, Technology and Economics	153	138	98	35	4	387	10.1%
Humanities, Social and Political Sciences	118	114	81	33	0	363	9.1%
Finance and Controlling	10	11	10	1	0	79	1.3 %
Corporate Communications	3	4	2	2	0	31	6.5%
Rectorate	9	8	6	1	1	81	2.5 %
ETH Library	98	93	72	14	5	319	6.0%
IT Services	31	16	8	6	2	228	3.5%
Human Resources and Services	16	17	5	3	9	126	9.5%
Real Estate and Facility Management	30	41	14	4	21	266	9.4%

 $<sup>^{*}</sup>$  incl. deaths, dismissals etc.  $^{**}$  by employee  $^{***}$  Excluding expired contracts

 $\rightarrow$  In 2011 521 employees received a loyalty bonus.

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