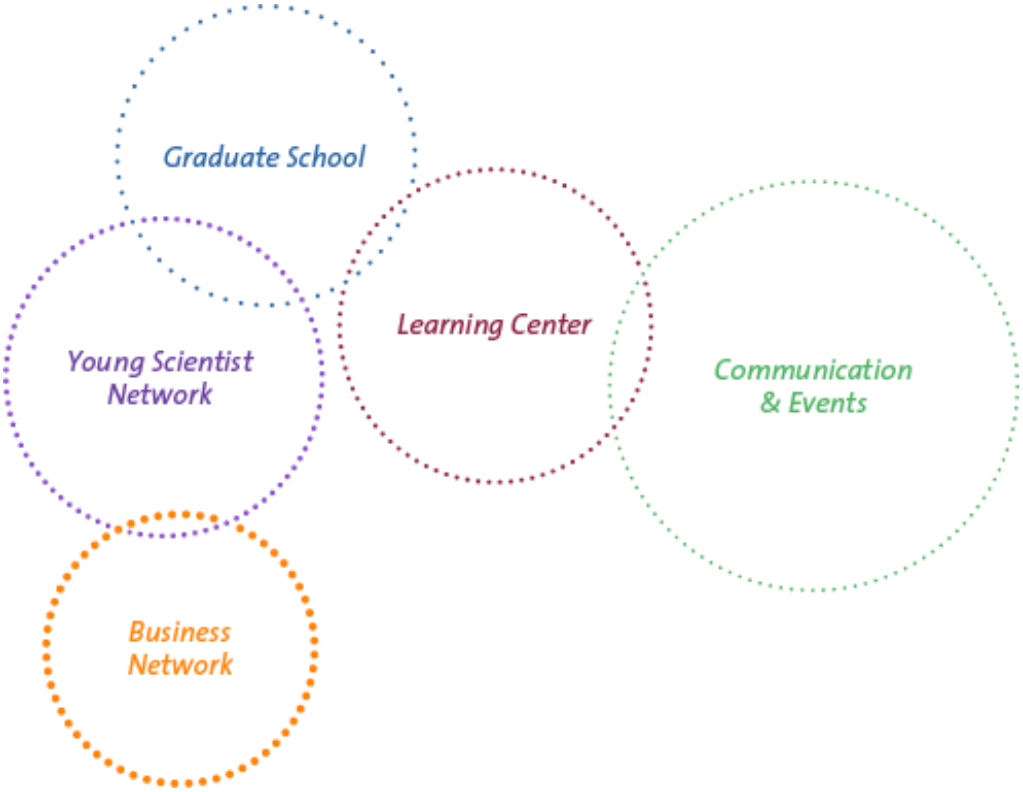
Universität Zürich[UZH]

ETH Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Life Science Zurich
Jahresbericht 2017



Jahresbericht Life Science Zurich 2017

1. Einleitung

Dr. Silvie Cuperus

Life Science Zurich blickt auf ein fruchtbares und aktives Jahr zurück. Im Bereich Communication & Events erfolgte ein Wechsel in der Leitung. Isabel Klusman verliess Ende September Life Science Zurich, um die Leitung des Zoologischen Museums zu übernehmen. Silvie Cuperus trat im Oktober ihre Nachfolge an.

In Zusammenarbeit mit verschiedenen Partnern realisierte Communication & Events folgende Aktivitäten: die Brainfair 2017 zum Thema «Faszination Gehirn», den schweizweiten Science Slam Wettbewerb «FameLab», Science Talks am Zürcher Film Festival und den Nationalen Zukunftstag für Kinder von UZH-Mitarbeitenden. Seit Oktober ist LSZ auf Social Media präsent. Neuigkeiten aus der Forschung der UZH und ETH sowie Veranstaltungshinweise und Beiträge über Projekte und Aktivitäten von LSZ werden über Twitter, LinkedIn und Facebook kommuniziert.

2017 wurde ein weiteres medizinisch ausgerichtetes PhD Programm in die Graduate School (GS) aufgenommen. Die GS umfasst nun zusammen mit «Clinical Science» 18 gemeinsam von der UZH und ETH geführte PhD-Programme und ein MD-PhD Programm der UZH.

Das Praktikumsangebot für Schulklassen von der Primarschule bis zum Gymnasium des Learning Center stösst auf reges Interesse. Die Anzahl durchgeführter Kurse konnte auf 163 erhöht werden (mit insgesamt 3200 Schülern und Schülerinnen). Nebst den Laborkursen für Schulen werden Weiterbildungskurse für Biologie-Lehrpersonen angeboten. Im Jahr 2017 wurden Kurse zu folgenden Themen realisiert: Fokus Herz, Neuroinformatik, Human Enhancement und CRISPR-Cas) sowie zu «Tierversuche in Schulklassen». Als besonders erfolgreich hervorzuheben sind die «Forschkisten». Die Entwicklung der Experimentierboxen für die Primarschule wurde vom MINT-Programm des Schweizerischen Akademie der Naturwissenschaften finanziert. Das Folgeprojekt für die Entwicklung von neuen Forschkisten und die Ausweitung des Angebots auf die Sekundarschulstufe wurde mit Erfolg eingereicht.

Am wichtigsten Anlass des Young Scientist Network, dem «Zurich Life Science Day» 2018 konnte Nobelpreisträger Martin Chalfie als Keynote speaker gewonnen werden (Berichtsperiode des YSN: 1. April bis 31. März 2017). Weitere Aktivitäten des YSN waren die Career Chats, Company Visits, die Zurich Life Science Week und MindSet, die insgesamt alle sehr gut besucht waren.

Die enge Zusammenarbeit zwischen den LSZ-Einheiten wie beispielsweise beim Kursprogramm der Graduate School, in der Organisation der BrainFair und des Nationalen Zukunftstags sowie die gegenseitige Unterstützung tragen zu einer grossen Wirkung von LSZ bei. Life Science Zurich zählte Ende 2017 sieben Mitarbeiterinnen und Mitarbeiter mit insgesamt 390 Stellenprozenten.

2. Life Science Zurich Communication & Events

Dr. Isabel Klusman / Dr. Silvie Cuperus

LSZ Communication & Events verbindet die biowissenschaftliche Forschung an der UZH und der ETH Zürich und setzt sich zum Ziel, diese für die interessierte Öffentlichkeit verständlich und ansprechend darzustellen. Bei Bedarf unterstützt die Einheit Forscherinnen und Forscher auch bei der Organisation von wissenschaftlichen Tagungen.

Isabel Klusman war bis Ende September 2017 für den Bereich Communication & Events verantwortlich. Ihre Nachfolgerin Silvie Cuperus übernahm ab Oktober die Geschäfte.

2.1 Aktivitäten

2.1.1 BrainFair 2017 «Faszination Gehirn»

Im Rahmen der internationalen «Woche des Gehirns» fand an mehreren Standorten vom 13. bis 18. März die BrainFair Zürich zum Thema «Faszination Gehirn» statt. Organisiert wird die BrainFair vom Zentrum für Neurowissenschaften Zürich zusammen mit Life Science Zurich. Die BrainFair findet jährlich statt und informiert die breite Öffentlichkeit über die aktuelle Forschung in den Neurowissenschaften. Siehe http://www.lifescience-zurichevents.uzh.ch/de/aktivitaeten/BrainFair.html) und http://www.brainfair.uzh.ch/de.html.

Die fünf Diskussionsforen zu den Themen «Wie entscheidet das Gehirn? Prozesse und Strukturen», «Epilepsie: Kurzschluss im Gehirn», «Sind Gehirnerschütterungen harmlos?», «Technologie nach neuronalem Vorbild» und «Wie bestimmt Schlaf unser Leben» fanden am Universitätsspital statt. Am Freitag, 17. März boten mehrere Institute und Kliniken Demonstrationen und Vorträge für Schulklassen an. Am Samstag, 18. März 2017 öffneten die Universität Zürich, das Universitätsspital, das Kinderspital, die Universitätsklinik Balgrist und das Swiss Concussion Center ihre Türen und gaben mit Demonstrationen, Vorführungen und Kurzvorträgen einen Einblick in ihre Forschungsarbeit. Isabel Klusman moderierte zwei Diskussionsforen und die Kurzvorträge am Tag der offenen Türen.

Für das detaillierte Programm zu den Diskussionsforen und zum Tag der offenen Türen (Kurzvorträge, Demonstrationen & Vorführungen) siehe Anhang.

Schulklassen konnten im Rahmen eines Spezialprogramms Vorträge und Demonstrationen an verschiedenen Orten besuchen. Knapp 800 Schülerinnen und Schüler (31 Klassen) nahmen am Programm teil.

Die Themen des Schulprogramms waren:

- ADHS und Aggressivität - wer bremst? (Vortrag)
- Drogen und das neugierige Gehirn von Jugendlichen (Vortrag)
- Wie das Gehirn hört und lernt (Vortrag und Demo)
- Neuropathologie mit Einblicken in Diagnostik & Hirnforschung (Vortrag und Demo)
- Sichtbarmachen von gesunden und krankhaften Vorgängen im Gehirn (Vortrag)
- ORL-Klinik, Thema Hören (Demo)
- Blick ins Gehirn mittels Magnetresonanztomographie (Demo)
- Vom Gehirn inspirierte Rechner, Roboter, Sensoren und Schaltkreise (Demo)
- Tiere stehen Modell für die Hirnforschung (Vortrag)

2.1.2 FameLab 2017

Seit 2012 organisiert Life Science Zurich zusammen mit CERN, dem British Council und mittlerweile auch mit der Universität Basel den Schweizer FameLab-Wettbewerb. Dieser internationale Science Slam für junge Forschende möchte neue Kommunikationstalente aus den Bereichen Naturwissenschaften, Ingenieurwissenschaften, Mathematik, Medizin und Psychologie aufspüren und fördern.

FameLab ist eine eingetragene Marke der Cheltenham Festivals. Dieser Veranstalter gehört zu den führenden Organisatoren von kulturellen Grossveranstaltungen in Grossbritannien und ist unter anderem für die vier grössten Festivals im Land verantwortlich: Jazz, Literatur, Musik und Wissenschaft.

Die Famelab Anlässe in der Schweiz fanden 2017 folgendermassen statt:

- Halbfinale für die Westschweiz am 29. März im Espace Dickens, Lausanne, organisiert vom BioScience Network Lausanne (BSNL), 10 Teilnehmende
- Halbfinale für die Deutsche Schweiz am 30. März im bqm an der ETH Zürich, organisiert von Life Science Zurich, 10 Teilnehmende
- Master class (zweitägiges Kommunikationstraining) für zehn Finalisten am 6. und 7. Mai, durchgeführt vom CERN mit einem professionellen Kommunikationstrainer aus Grossbritannien
- Nationales Finale am 19. Mai in der Markthalle in Basel, bei dem die zehn Finalistinnen und Finalisten um den ersten Platz kämpfen, organisiert vom Science Slam Club Basel. Die Beiträge der Finalisten können auf dem Youtube Kanal von Science Slam Basel angesehen werden.

Katarina Cisarova, eine PhD Studentin an der Universität Lausanne, konnte mit ihrem Beitrag «Out of the Blue: The Story of Blue Eyes» die Jury überzeugen. Als Gewinnerin von FameLab Switzerland 2017 vertrat sie die Schweiz am internationalen FameLab Wettbewerb in Cheltenham im Juni 2017.

Mit dem Video von Andrea Spinnler, die ebenfalls am Famelab 2017 teilnahm, war die UZH am Wettbewerb «3 Minute Thesis» vertreten. Ihr Beitrag über «The Busy Bees of Our Brain» ist unter http://www.u213mt.com/u21_3MT_vidz zu finden.

2.1.3 ZFF-Talks am Zurich Film Festival

Der Verein «Eye on Science» (EOS) konnte zum zweiten Mal während dem Zürcher Film Festival (ZFF) Talks zu Life Science-Themen anbieten. LSZ ist Partner von EOS und hat die Talks organisiert.

«AIDS: Gestern Todesurteil, heute normales Leben, morgen Heilung?»
Zum Film **«120 Battements par Minutes»** am Dienstag, 3. Oktober, mit Alexandra Trkola, HIV-Forscherin und Direktorin des Instituts für Medizinische Virologie (UZH), Huldrych Günthard, Leitender Arzt am USZ und Präsident der Schweizerischen HIV-Kohortenstudie und David Haerry, Vorsitzender des Positivrats, welches sich für Interessen der Menschen mit HIV einsetzt, Moderation Monika Schaerer

«Hitzige Debatte Klimawandel»
Zum Film **«An Inconvenient Sequel: Truth to Power»** am Freitag, 6. Oktober, mit Thomas Stocker, Klimaforscher an der Universität Bern und Gewinner des Schweizer Wissenschaftspreis Marcel Benoist 2007 und Michael Zemp, Privatdozent an der UZH und Spezialist für Gletscher, Schnee und Eis, Moderation Beat Glogger

2.1.4 Nationaler Zukunftstag 2017

Am 9. November organisierte Life Science Zurich gemeinsam mit Simone Tix (Biochemisches Institut, UZH), Irène Studer-Rohr (Institut für Chemie, UZH) Katharina Müller (Science Lab des MNF) und Isabel Klusman Zoologisches Museum, UZH) den Nationalen Zukunftstag der MNF. Der Nationale Zukunftstag wurde zum achten Mal auf dem Irchel Campus für Kinder von Mitarbeitenden der UZH angeboten.

Dieses Mal konnten 88 Schülerinnen und Schüler der 5. bis 7. Klasse im regulären Programm eingeteilt werden. Jedes Kind besuchte drei der folgenden Angebote:

- «CO_2 – lebenswichtig und lebensgefährlich» (Milena Maechler, Science Lab der MNF)
- «Die Molekulare Küche» (Damian und Erich Brunner, Institut für Molekulare Biologie)
- «3-D Sehen und 3-D Modelle» (Johann Müller, Institut für Geographie)
- «Kristalle züchten» (Beat Blattmann, Biochemisches Institut)
- «Magnetische Spielereien» (Katharina Müller, Science Lab der MNF)
- «Mathe macht Spass» (Tatjana Miladinovic, Institut für Mathematik)
- «Roboter mit künstlichen Neuronen steuern» (Yulia Sandamirskaya, Institut für Neuroinformatik)
- «Seziere ein Herz» (Diane de Zélicourt und Lena Wiegmann, Physiologisches Institut)
- «Spass mit Chemie» (René Oetterli, Science Lab der MNF)
- «Unsere Erbsubstanz in der Kopiermaschine» (Claudia Bischoff, LSZ Learning Center)
- «Vom Ei zum Küken» (Esther Stöckli, Institut für Molekulare Biologie)
- «Zu Besuch bei den Erdmännchen» (Ramona Rauber, Institut für Evolutionsbiologie & Umweltwissenschaften)

4 Workshops für total 40 Mädchen befassten sich mit folgenden Themen:

- «Bau dir einen elektrischen Schaltkreis» (Daniel Kiper, LSZ Learning Center)
- «Löten, fertig los!» (Peter Robmann, Physik-Institut)
- «Programmiere dein eigenes Computerspiel» (Steve Rast, Biochemisches Institut)
- «Schlüsselanhänger aus dem 3D-Drucker: wie geht das?» (Olivia Pirolt, Hauptbibiothek UZH)

Erstmals fand im Zoologische Museum ein Workshop für 15 Mädchen und Jungen statt:

- «Naturlabor im Museum» (Ursina Koller und Esther Bärtschi, Zoologisches Museum)

Wie üblich trafen sich Eltern und Kinder am Schluss des Nachmittags in der Vorlesung «Fliegender Zirkus der Physik» von Peter Robmann (Physik-Institut) und erlebten gemeinsam die Physikshow. Insgesamt besuchten 128 Kinder das MNF-Programm am «Nationalen Zukunftstag» 2017.

2.1.5 Social Media Präsenz von Life Science Zurich

Seit Oktober 2017 baut Silvie Cuperus die Social Media Präsenz von Life Science Zurich auf. Neuigkeiten aus der Forschung der UZH und ETH sowie Veranstaltungshinweise und Beiträge über Projekte und Aktivitäten von LSZ werden über Social Media kommuniziert. Twitter, LinkedIn und Facebook sollen die Kommunikation von LSZ verstärken und einen Beitrag zur Orientierung der Gesellschaft über die Life Science Forschung leisten. Dabei sollen insbesondere junge Menschen angesprochen werden. Social Media ermöglicht auch eine Vernetzung von LSZ mit weiteren Organisationen in der Wissenschaftsvermittlung und -kommunikation, wie Sciences et Cité, reatch – research and technology in Switzerland, Eye on Science, higgs und weitere Akteure.

LSZ ist auf folgenden Kanälen vertreten:

- **Facebook:** https://www.facebook.com/LifeScienceZH/
- **LinkedIn:** https://www.linkedin.com/company/life-science-zh/
- **Twitter:** https://twitter.com/Life_Science_ZH

2.2 Vorbereitungen für künftige Projekte

2.2.1 BrainFair 2018 «Gehirn und Schmerz»

Die BrainFair 2018 widmet sich dem Thema Schmerz. Vom 12. – 17. März 2018 sind abends fünf Diskussionsforen am Universitätsspital geplant. Am Donnerstag 15. März wird an der Kantonschule Zürich Nord ein Programm mit Vorträgen für Schulklassen organisiert. Am Samstag, 17. März sollen Kurzvorträge angeboten werden. Isabel Klusman wird zwei Foren moderieren.

2.2.2 FameLab 2018

Für die Organisation des Schweizerischen FameLab Wettbewerbs 2018 wird LSZ sich wiederum mit der Universität Basel, dem BioScience Network Lausanne (BSNL) sowie CERN zusammenschliessen.

2.3 Netzwerke / Kommissionsarbeit / Kontakte

Isabel Klusman (bis September 2017) und Silvie Cuperus (ab Oktober 2017) sind Mitglied folgender Netzwerke und Kommissionen:

- **Abteilungstreffen Prorektorat Medizin und Naturwissenschaften der UZH** (Christoph Hock und Stab). Austausch zwischen Prorektorat MNW und den angegliederten Einheiten EU GrantsAccess, Unitectra, LASC und LSZ. Treffen ca. 6 Mal pro Jahr, bis zum 1. August 2017. Am 1. August 2017 wurde das ehemalige Prorektorat Medizin und Naturwissenschaften (MNW) aufgeteilt und in die neuen Prorektorate "Medizin" und "Veterinärmedizin und Naturwissenschaften" (VNW) überführt.
- **Netzwerk Kommunikation der UZH** (Jürg Dinner und UZH-Kommunikationsteam) Austausch zwischen der Abteilung Kommunikation, den Kommunikationsbeauftragten der Fakultäten, dem Bereich Lehre, der Personalabteilung und LSZ. Treffen ca. 3-4 Mal pro Jahr.
- **MNF Kommunikations-Kommission (Komm-Komm) der UZH** (Michael Schaepman (bis 31.07.2017) / Joachim Rosenthal (ab 01.08.2017) und Stab), Austausch zwischen den Kommunikationsbeauftragten der MNF-Fachbereichen, den Ständevertretungen und LSZ. Treffen ca. 5 Mal pro Jahr.
- **MNF-Kaderkonferenz der UZH** (Michael Schaepman (bis 31.07.2017) / Roland Sigel (ab 01.08.2017) und Stab), Austausch zwischen Institutsdirektorien und Institutsgeschäftsführungen der MNF. Treffen 2 Mal pro Jahr.
- **Konferenz des Departements Biologie der ETH** (Ruedi Aebersold und Stab), Isabel Klusman / Silvie Cuperus vertritt LSZ als Gast an den D-BIOL-Konferenzen ca. 4 Mal pro Jahr.
- **Netzwerk Hochschulkommunikation ETH** (Team der ETH-Hochschulkommunikation) Austausch zwischen der Hochschulkommunikation und den Kommunikationsbeauftragten der Departemente in Form von Lunch-Box-Veranstaltungen zu spezifischen Themen. Treffen ca. 2-3 Mal pro Jahr.

2.4 Finanzen

Abrechnung 2017 LSZ Communication & Events G-74010-01-01

	2016	2017
Einnahmen	**CHF**	**CHF**
Jahresbeitrag UZH / ETH	182’000	162’200
weitere Einnahmen	7’282	
Total Einnahmen	**189’282**	**162’200**

Ausgaben	**CHF**	**CHF**
Büromaterial	542	677
Repräsentationsspesen	238	145
Telefonie und Internet	552	497
Kongresse und Veranstaltungen	2’011	0
Betriebsmaterial & Drucksachen, Fotokopien, usw.	505	20
Reisespesen	2’554	1’903
Honorare für Beratung	2’800	0
Dienstleistungen Grafik	1’729	1’701
Übrige Dienstleistungen	1’701	0
Verschiedenes	73	0
Verschiedene Personalkosten	718	409
Verpflegungspesen (Lunch-Checks)	2’250	2’625
Lohnkosten ohne Sozialleistungen	169’141	160’445
IT Hard-und Software (Unterhalt und Verbrauchsmaterial)		124
Anschaffung EDV Hardware		7’157
Sozialleistungen	*33’047*	*34’660*
Total Aufwand ohne Sozialleistungen	**184’814**	**175’703**
Total Aufwand inkl. Sozialleistungen	*217’861*	*210’363*

Abschluss	**4’468**	**-13’503**

Das PSP-Element schliesst 2017 mit einem Negativsaldo ab. Dieser ist zurückzuführen auf den tieferen Jahresbeitrag UZH/ ETH, der im 2017 um CHF 19'800 geringer war. Die Kosten fielen trotz ausserordentlicher Anschaffung von EDV-Hardware von CHF 7'157 um etwas über CHF 9'000 niedriger aus. Dies liegt zum grössten Teil daran, dass die Lohnkosten 2017 tiefer waren.

Abrechnung 2017 LSZ CE Aktivitäten F-74010-01-01

	2016	2017
Einnahmen	**CHF**	**CHF**
Zuwendung cogito foundation (für Rigi Workshop Storyboarding Science)	10’000	
Führungen	1’020	
Verkauf Ausstellungsmaterial	200	
Zurückzahlung Reisekosten FameLab 2016	863	
Total Einnahmen	**12’083**	**0**

Ausgaben	**CHF**	**CHF**
Repräsentationsspesen	192	0
Löhne Assistenten Krokodil-Ausstellung	939	0
Sozialleistungen WP	79	0
Total Aufwand inkl. Sozialleistungen	**1’210**	**0**

Jahresergebnis per 31.12 in CHF	**10’873**	**0**

Insgesamt beträgt der Kontostand per 31.12.2017 CHF 30'192.

Abrechnung LSZ ETH Fonds 0-44698-07

	2016	2017
Saldo per 1. Januar in CHF	**276'908 CHF**	**282'332 CHF**

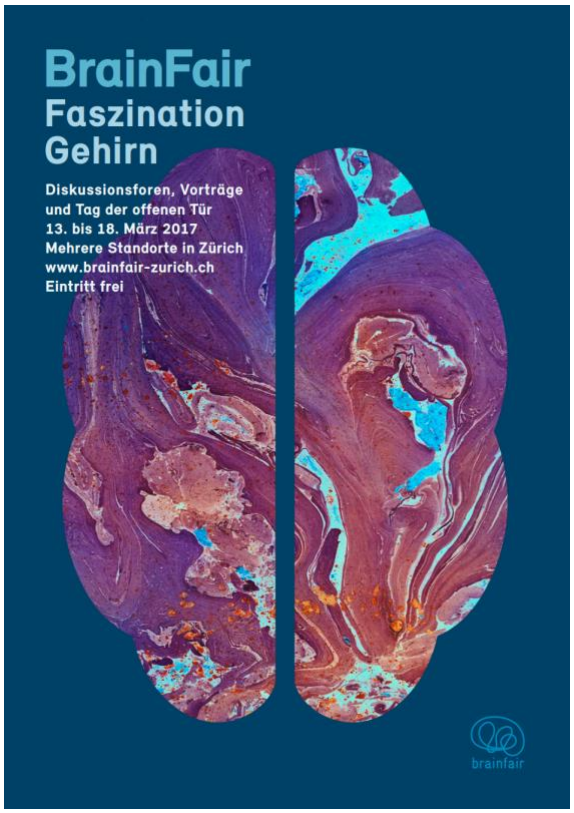
Einnahmen	**CHF**	**CHF**
ETH-Jahresbeitrag Communication & Events und Learning Center	250'000	250'000
ETH-Jahresbeitrag Graduate School	300'000	300'000
Gutschriften z.L. von 2-71474-12 (9.2.2017)	111'620	
Gutschriften z.L. von 2-71474-12 (5.4.2017)	49'560	
Gutschriften z.L. von 2-71474-12 (2.6.2017)	10'000	
Total Einnahmen	**721'180**	**550'000**

Ausgaben	**CHF**	**CHF**
Überweisung LSZ UZH-Kostenstelle / Lohnausgleich	180'000	200'000
Mittelverschiebung z.G. 1-67607-09 Cancer Biology PhD Program	20'460	15'000
Mittelverschiebung z.G. 1-67205-02 Plant Science	41'150	0
Mittelverschiebung z.G. 1-67205-02 Plant Science	10'000	12'550
Mittelverschiebung z.G. 1-67205-02 Plant Science	19'650	17'800
Mittelverschiebung z.G. 1-67506-07 MIM	46'860	34'450
Mittelverschiebung z.G. 0-10231-11 Systems Biology	45'500	33'500
Mittelverschiebung z.G. 0-44644-16 MTB	99'860	0
Mittelverschiebung z.G. 0-04803-05 MLS	73'850	28'000
Mittelverschiebung z.G. 2-75502-15 RNA	2'300	4'200
Mittelverschiebung z.G. 2-70114-05 Neuro	35'850	36'700
Mittelverschiebung z.G 1-67527-07 Graduate School	127'500	117'800
Rückzahlung Restmittel MLS z.G. 2-7147412	0	282
Team-Ausflug Restaurant Bowling West	171	0
Plakatversand ZFF-Talks (ETH), Druck- und Versandkosten	105	145
Honorare Moderation ZFF Talks	0	1'400
Herstellung Herzpräparate UZH	3'500	0
Aufwand Rigi-Workshop 2017	9'000	5'099
Druck und Produktion Kinderbuch "Tortuga erforscht die Evolution"	0	5'811
Total Ausgaben	**715'756**	**512'737**

Jahresergebnis per 31.12.	**5'424**	**37'263**

Abschluss per 31.12 in CHF	**282'332**	**319'595**

Anhang BrainFair 2017



Faszination Gehirn

Das Gehirn ist wohl das komplizierteste, aber auch faszinierendste Organ. Es umfasst etwa 100 Milliarden Nervenzellen, die für das Funktionieren vom Körper und Geist verantwortlich sind. Wie kommunizieren diese Nervenzellen miteinander? Was passiert, wenn die Zellen verletzt oder angegriffen werden? Was braucht das Gehirn, um optimal zu funktionieren? Und welche Techniken werden heute in der Hirnforschung eingesetzt? Diese und weitere Fragen werden am 20-jährigen Jubiläum der «Woche des Gehirns» in Diskussionsforen und Vorträgen diskutiert und beantwortet. Ausserdem findet am Samstag, 18. März ein «Tag der offenen Tür» statt: Besuchen Sie Labore, Kliniken und Institute, erleben Sie die Forschung hautnah mit und lassen Sie sich vom Gehirn faszinieren.

Diskussionsforen

Montag, 13. bis Freitag, 17. März 2017, UniversitätsSpital Zürich (USZ)

Wie entscheidet das Gehirn? Prozesse und Strukturen
Wolfger von der Behrens (Neurobiologe, UZH & ETH), Valerio Mante (Neurowissenschaftler, UZH & ETH) und Christian Ruff (Neuroökonom, UZH)
Moderation: Christian Breitschmid (Journalist)
grosser Hörsaal NORD I (Frauenklinikstrasse 10)
Montag, 13. März, 18.30 – 20.30 Uhr

Epilepsie: Kurzschluss im Gehirn
Jean-Marc Fritschy (Neurowissenschaftler, UZH), Georgia Ramantani (Kinderärztin, Kinderspital Zürich & Schweizerische Epilepsie-Klinik) und Thomas Grunwald (Neurologe, Schweizerische Epilepsie-Klinik & USZ)
Moderation: Marina Villa (Medientrainerin)
Hörsaal WEST (Rämistrasse 100)
Dienstag, 14. März, 18.30 – 20.30 Uhr

Sind Gehirnerschütterungen harmlos?
Nina Feddermann (Neurologin, USZ & Swiss Concussion Center), Peter Zangger (Neurologe, FRAGILE Suisse) und Andreas Meyer-Heim (Kinderarzt, Rehabilitationszentrum Affoltern & Kinderspital Zürich)
Moderation: Christian Breitschmid (Journalist)
grosser Hörsaal NORD I (Frauenklinikstrasse 10)
Mittwoch, 15. März, 18.30 – 20.30 Uhr

Technologie nach neuronalem Vorbild
Yulia Sandamirskaya (Physikerin, UZH & ETH), Jörg Conradt (Neuroinformatiker, Technische Universität München) und Richard George (Biomedizinischer Ingenieur, UZH & ETH)
Moderation: Marina Villa (Medientrainerin)
grosser Hörsaal NORD I (Frauenklinikstrasse 10)
Donnerstag, 16. März, 18.30 – 20.30 Uhr

Wie bestimmt Schlaf unser Leben?
Christian Baumann (Neurologe, USZ), Steven Brown (Neurowissenschaftler, UZH) und Björn Rasch (Neuropsychologe, Universität Freiburg)
Moderation: Isabel Klusman (Wissenschaftskommunikatorin)
grosser Hörsaal NORD I (Frauenklinikstrasse 10)
Freitag, 17. März, 18.30 – 20.30 Uhr

Tag der offenen Tür

Samstag, 18. März 2017, UZH, USZ, KiSpi, Balgrist, Swiss Concussion Center
An fünf verschiedenen Standorten öffnen Institute und Kliniken ihre Türen und bieten mit Demonstrationen, Vorführungen und Vorträgen einen Einblick in ihre Forschungsarbeit.

KURZVORTRÄGE

Universität Zürich Irchel (UZH), Winterthurerstrasse 190, Zürich, Hörsaal G 45
Tram 7 und 14 bis Haltestelle Milchbuck
Tram 9 und 10 bis Haltestelle Universität Irchel

Moderation: Isabel Klusman (Wissenschaftskommunikatorin)

11.00 – 11.20 Uhr	**Tinnitus und Neuromodulation – Implikationen für neue Therapien** Martin Meyer
11.20 – 11.40 Uhr	**Migraine and Pain** (in englischer Sprache) Mirko Santello
11.40 – 12.00 Uhr	**Auswirkungen von Handystrahlung auf den Schlaf** Peter Achermann
12.00 – 12.20 Uhr	**Hirnschlag: was geschieht im Gehirn?** Susanne Wegener
12.20 – 14.00 Uhr	Pause
14.00 – 14.20 Uhr	**Sichtbarmachen von gesunden und krankhaften Vorgängen im Gehirn** Nathalie Grob
14.20 – 14.40 Uhr	**Das Gehirn im Ei – Wie das Nervensystem entsteht** Esther Stöckli
14.40 – 15.00 Uhr	**Neue Nervenzellen für alte Gehirne** Sebastian Jessberger
15.00 – 15.20 Uhr	**Schlaf im Alter** Hans-Peter Landolt
15.20 – 15.40 Uhr	**Kleiner Fisch ganz gross in der Hirnforschung** Stephan Neuhauss
15.40 – 16.00 Uhr	**Zwei-Photonen-Mikroskopie: Dem Gehirn beim Denken zusehen** Fritjof Helmchen
16.00 – 16.20 Uhr	**Wie Fliegenhirne lernen** Martin Müller
16.20 – 16.40 Uhr	**Lernen und Schlaf** Reto Huber

DEMONSTRATIONEN UND VORFÜHRUNGEN

Universität Zürich Irchel, Winterthurerstrasse 190, Zürich, 10.00 – 17.00 Uhr
Tram 7 und 14 bis Haltestelle Milchbuck
Tram 9 und 10 bis Haltestelle Universität Irchel
In der UZH-Cafeteria «Seerose» gibt es Verpflegungsmöglichkeiten

☺ **Vom Gehirn inspirierte Rechner, Roboter, Sensoren und Schaltkreise**
Institut für Neuroinformatik, UZH und ETH Zürich
Durchgehend von 10.00 – 17.00 Uhr (Bau 55 G)

☺ **Was Tiere uns über unser Gehirn lehren**
💻 Institut für Molekulare Biologie, UZH
10.00 – 11.00 / 12.00 – 13.00 / 14.00 – 15.00 Uhr (Bau 32 J)

☺ **Schaltkreise im Gehirn / Form und Struktur der Nervenzellen**
Institut für Hirnforschung, UZH und ETH Zürich
Durchgehend von 10.00 – 17.00 Uhr (Bau 55 H & J)

☺ **Das schlafende Gehirn / Schmerz: Was passiert im Gehirn? /**
Nervenzellen im Mikroskop anschauen /
Einfluss von elektromagnetischen Feldern auf die Hirnaktivität
Institut für Pharmakologie und Toxikologie, UZH
Durchgehend von 10.00 – 17.00 Uhr (Bau 17 G, H & J)

Neurofeedback und EEG in Verbindung mit Hören
Psychologisches Institut, UZH
Durchgehend von 10.00 – 17.00 Uhr (Lichthof)

💻 **Biofeedback-Training für aggressive Kinder**
Klinik für Kinder- und Jugendpsychiatrie und Psychotherapie, PUK
Durchgehend von 10.00 – 17.00 Uhr (Lichthof)

Seelische Krankheiten besser verstehen und behandeln
Klinik für Psychiatrie, Psychotherapie und Psychosomatik, PUK
Durchgehend von 10.00 – 17.00 Uhr (Lichthof)

☺ **Gesunde und krankhafte Vorgänge im Gehirn sichtbar machen**
Institut für Pharmazeutische Wissenschaften, ETH Zürich
Durchgehend von 10.00 – 17.00 Uhr (Lichthof)

Tag der offenen Tür

Samstag, 18. März 2017, UZH, USZ, KiSpi, Balgrist, Swiss Concussion Center
An fünf verschiedenen Standorten öffnen Institute und Kliniken ihre Türen und bieten mit Demonstrationen, Vorführungen und Vorträgen einen Einblick in ihre Forschungsarbeit.

KURZVORTRÄGE

Universität Zürich Irchel (UZH), Winterthurerstrasse 190, Zürich, Hörsaal G 45
Tram 7 und 14 bis Haltestelle Milchbuck
Tram 9 und 10 bis Haltestelle Universität Irchel

Moderation: Isabel Klusman (Wissenschaftskommunikatorin)

11.00 – 11.20 Uhr	**Tinnitus und Neuromodulation – Implikationen für neue Therapien** Martin Meyer
11.20 – 11.40 Uhr	**Migraine and Pain** (in englischer Sprache) Mirko Santello
11.40 – 12.00 Uhr	**Auswirkungen von Handystrahlung auf den Schlaf** Peter Achermann
12.00 – 12.20 Uhr	**Hirnschlag: was geschieht im Gehirn?** Susanne Wegener
12.20 – 14.00 Uhr	Pause
14.00 – 14.20 Uhr	**Sichtbarmachen von gesunden und krankhaften Vorgängen im Gehirn** Nathalie Grob
14.20 – 14.40 Uhr	**Das Gehirn im Ei – Wie das Nervensystem entsteht** Esther Stöckli
14.40 – 15.00 Uhr	**Neue Nervenzellen für alte Gehirne** Sebastian Jessberger
15.00 – 15.20 Uhr	**Schlaf im Alter** Hans-Peter Landolt
15.20 – 15.40 Uhr	**Kleiner Fisch ganz gross in der Hirnforschung** Stephan Neuhauss
15.40 – 16.00 Uhr	**Zwei-Photonen-Mikroskopie: Dem Gehirn beim Denken zusehen** Fritjof Helmchen
16.00 – 16.20 Uhr	**Wie Fliegenhirne lernen** Martin Müller
16.20 – 16.40 Uhr	**Lernen und Schlaf** Reto Huber

DEMONSTRATIONEN UND VORFÜHRUNGEN

Universität Zürich Irchel, Winterthurerstrasse 190, Zürich, 10.00 – 17.00 Uhr
Tram 7 und 14 bis Haltestelle Milchbuck
Tram 9 und 10 bis Haltestelle Universität Irchel
In der UZH-Cafeteria «Seerose» gibt es Verpflegungsmöglichkeiten

☺ **Vom Gehirn inspirierte Rechner, Roboter, Sensoren und Schaltkreise**
Institut für Neuroinformatik, UZH und ETH Zürich
Durchgehend von 10.00 – 17.00 Uhr (Bau 55 G)

☺ **Was Tiere uns über unser Gehirn lehren**
💻 Institut für Molekulare Biologie, UZH
10.00 – 11.00 / 12.00 – 13.00 / 14.00 – 15.00 Uhr (Bau 32 J)

☺ **Schaltkreise im Gehirn / Form und Struktur der Nervenzellen**
Institut für Hirnforschung, UZH und ETH Zürich
Durchgehend von 10.00 – 17.00 Uhr (Bau 55 H & J)

☺ **Das schlafende Gehirn / Schmerz: Was passiert im Gehirn? /**
Nervenzellen im Mikroskop anschauen /
Einfluss von elektromagnetischen Feldern auf die Hirnaktivität
Institut für Pharmakologie und Toxikologie, UZH
Durchgehend von 10.00 – 17.00 Uhr (Bau 17 G, H & J)

Neurofeedback und EEG in Verbindung mit Hören
Psychologisches Institut, UZH
Durchgehend von 10.00 – 17.00 Uhr (Lichthof)

💻 **Biofeedback-Training für aggressive Kinder**
Klinik für Kinder- und Jugendpsychiatrie und Psychotherapie, PUK
Durchgehend von 10.00 – 17.00 Uhr (Lichthof)

Seelische Krankheiten besser verstehen und behandeln
Klinik für Psychiatrie, Psychotherapie und Psychosomatik, PUK
Durchgehend von 10.00 – 17.00 Uhr (Lichthof)

☺ **Gesunde und krankhafte Vorgänge im Gehirn sichtbar machen**
Institut für Pharmazeutische Wissenschaften, ETH Zürich
Durchgehend von 10.00 – 17.00 Uhr (Lichthof)

UniversitätsSpital Zürich (USZ), mehrere Adressen und wechselnde Zeiten
Tram 9 oder 10 bis Haltestelle ETH / Universitätsspital
Im «Bistro NORD» gibt es Verpflegungsmöglichkeiten

☺ **Neuropathologie: Schnittstelle von Diagnostik und Hirnforschung**
💻 Institut für Neuropathologie, Schmelzbergstrasse 12, Zürich,
Eingang Neuropathologie, F-Stock
9.00 – 10.30 / 11.00 – 12.30 / 14.00 – 15.30 / 16.00 – 17.30 Uhr,
pro Zeitfenster max. 30 Pers.

💻 **Wie werden Essstörungen diagnostiziert und behandelt?**
Zentrum für Essstörungen, Klinik für Psychiatrie und Psychotherapie,
Culmannstrasse 8, Zürich
10.00 – 10.45 / 11.15 – 12.00 Uhr, pro Zeitfenster max. 40 Pers.

☺ **Schwindel und neurologische Sehstörungen**
Klinik für Neurologie / Augenklinik / ORL,
Frauenklinikstrasse 26, Zürich, Treffpunkt Monakow-Hörsaal
9.00 – 10.00 / 11.00 – 12.00 / 13.00 – 14.00 / 15.00 – 16.00 Uhr

Wie funktioniert das Hören mit Implantaten?
Audiologie, ORL-Klinik, Frauenklinikstrasse 24, Zürich, B-Stock
Durchgehend von 10.00 – 13.00 Uhr

Wie werden Schlafstörungen diagnostiziert und medizinisch behandelt?
Schlaflabor, Klinik für Neurologie, Frauenklinikstrasse 26, Zürich
Durchgehend von 10.00 – 13.00 Uhr

Kinderspital Zürich (KiSpi), Steinwiesstrasse 75, Zürich, 9.00 – 13.00 Uhr
Tram 5 oder 6 bis Haltestelle Platte
Tram 3 oder 8 bis Haltestelle Hottingerplatz

💻 **Der Blick ins Gehirn mittels Magnetresonanztomographie**
Zentrum für MR-Forschung
9.00 – 10.00 / 10.30 – 11.30 / 12.00 – 13.00 Uhr,
pro Zeitfenster max. 10 Pers.

☺ für Familien geeignet 💻 Anmeldung über die BrainFair-Webseite erforderlich

Balgrist Campus, Lengghalde 5, Zürich
10.00 – 13.00 Uhr
Tram 11 und Forchbahn S18 bis Haltestelle Balgrist

Neurorehabilitation der Zukunft
Forschung Zentrum für Paraplegie / Sensory-Motor System Lab / Rehabilitation Engineering Lab
10.00 – 11.00 / 11.00 – 12.00 / 12.00 – 13.00 Uhr,
pro Zeitfenster max. 40 Pers.

Swiss Concussion Center (SCC), Schulthess Klinik, Lengghalde 2, Zürich
10.00 – 13.00 Uhr
Tram 11 und Forchbahn S18 bis Haltestelle Balgrist

Sind Gehirnerschütterungen harmlos?
Durchgehend von 10.00 – 13.00 Uhr

Programm für Schulen

Am Freitag, 17. März bieten mehrere Institute und Kliniken zu einer Fülle von Themen Demonstrationen und Vorträge für Schulklassen an. Die Liste der Angebote zusammen mit der Online-Anmeldung finden Sie von 13. Januar 2017 bis 10. Februar 2017 auf der BrainFair-Webseite www.brainfair-zurich.ch.

BrainFair Organisationskomitee

Leitung: Wolfgang Knecht, Zentrum für Neurowissenschaften Zürich, UZH & ETH
Noémie Frézel, Institut für Pharmakologie & Toxikologie, UZH
Tamara Häberlin, Zentrum für Neurowissenschaften Zürich, UZH & ETH
Marie-Claude Hepp-Reymond, Institut für Neuroinformatik, UZH & ETH
Daniel Kiper, Life Science Zurich und Institut für Neuroinformatik, UZH & ETH
Isabel Klusman, Life Science Zurich, UZH & ETH
Karin Kucian, Zentrum für MR-Forschung, Universitäts-Kinderspital Zürich
Michael Rufer, Klinik für Psychiatrie und Psychotherapie, USZ
Yulia Sandamirskaya, Institut für Neuroinformatik, UZH & ETH
Christina Sina, Institut für Hirnforschung, UZH
Helen Stauffer, Life Science Zurich, UZH & ETH
Dominik Straumann, Klinik für Neurologie, USZ
Konrad Weber, Klinik für Neurologie und Augenklinik, USZ

Kontaktadresse

Tamara Häberlin
Zentrum für Neurowissenschaften Zürich
Tel: 044 635 33 81
E-Mail: info@neuroscience.uzh.ch

Mit Unterstützung von:

3. Life Science Zurich Graduate School

Dr. Susanna Bachmann

3.1 Executive summary

In May 2017, the Life Science Zurich Graduate School accepted the PhD program in Clinical Science as a new member program. With this addition, the Graduate School now houses 17 joint ETH/UZH PhD programs and one MD-PhD Program (only UZH). The Clinical Science program had already been launched before and thus joined the LSZ GS immediately. It took part in the common recruitment and offered to use the new application platform in order to test it for the LSZ GS. The Graduate School now includes 575 research group leaders and 1,560 doctoral students (as of 31 December 2017, including the students enrolled at the Universities of Basel and Berne via the Plant Science and the RNA Biology programs).

While the number of applicants for the winter and summer deadline had remained constant over the past two years (1'200 and 1'400, respectively), during 2017 we observed a downward trend. With 1'124 complete applications, we obtained nearly 300 applications less than the summer before and the negative trend continued in December with only 1,027 complete applications. The reduction in number was not especially pronounced for specific countries but rather equally distributed among all nations. It also included countries like the Indian subcontinent (Bangladesh, India and Pakistan) with a drop of 33% in winter and 20% in summer, respectively, as well as many European countries such as Italy (minus 50% for the winter deadline) and Germany (30%). One of the few exceptions is Switzerland, where the number of applications remained stable on a very low level. Although the quantity of applicants is of course less important than their experience and subject knowledge, the Graduate School clearly missed its goal to invite 2 applicants for each open position for both recruitment rounds in 2017. Luckily, the drop-out-rates before and after the interview, the number of students without a match or those who decided against the LSZ GS, were similar to those in past years. Thus, the number of candidates at interview (132 in February and 136 in September), free slots (114 and 99) and matches (63 and 70) corresponded over both rounds to the average ratio of past years.

In 2017, the LSZ GS only moderately extended its by now well-established PhD student database, named "DissGo". The most obvious change is the re-design of the "PhD Process" tab, which is now named "Milestones" and contains a well-ordered overview of upcoming deadlines and it lists all milestones with their status and deadlines. Another positive development is the fact that the PhD program in Economics of the University of Zurich is now also using "DissGo" for the administration of its PhD students. We hope that other entities of the University and maybe also ETH will follow in the near future.

In 2017, the Graduate School was busy with preparing the switch from its own recruiting tool to a ready-made platform, which we are hiring from Glowbase since early fall. The newly accepted PhD program in Clinical Science was testing the platform as of September and in December we linked the database for this subprogram with our recruitment websites. The recruitment process and its administration using this new platform ran smoothly for the Clinical Science program in the winter recruitment round. Furthermore, new features offered by the platform relieved the Clinical Science program coordinators from a lot of support work for the applicants. However, the real test of the platform will only occur in July 2018 when all the PhD programs will have to administrate approximately 1000 applications in total.

As in former years, the LSZ GS organized 40 transferable skills courses in 2017, of which 13 were jointly offered by a PhD program or another university institution and the Graduate School. Nearly all courses were fully booked and not all students on the waiting lists could eventually be accepted. The doctoral students continue to be very satisfied with the course program and the evaluation of all courses is good to excellent. As in past years, the program included some methodical courses, such as "Next Generation Sequencing" and "Microscopy Toolbox". Again, the transferable skills course program comprised a mix of popular "longsellers" such as "Presenting in English" and "Selfmarketing skills" and some new courses like "Convincing and Debating" and several "BioEntrepreneurship &

Innovation" courses. The 2-hour lecture "Introduction to Scientific Integrity and Good Scientific Practice", compulsory for the doctoral students of 10 PhD programs, took place three times with approximately 50–60 participants each.

3.2 Introduction

The idea to found a graduate school that houses all the different PhD programs in the Life Sciences offered at the University of Zurich and the ETH Zurich came up in September 2005. On 8 December 2005, the Life Science Zurich Graduate School was officially launched and became an autonomous branch of the Life Science Zurich Initiative. The LSZ Graduate School now consists of eighteen highly competitive PhD programs. Thanks to a strong teaching curriculum and a clear mentoring system these programs attract the best students worldwide.

3.2.1 Mission

The aim of the Life Science Zurich Graduate School is to promote first-class graduate education in the life sciences at the University of Zurich (UZH) and the ETH Zurich (ETH). The LSZ GS offers centralized services (e.g. recruitment administration, assistance in identifying new funding possibilities) and products (e.g. transferable skills courses) that support established PhD programs and facilitate the development of new programs in the Life Sciences. The centralized administration of these services enables the individual PhD programs to focus on the education of their graduate students within the respective research fields. The individual PhD programs are thereby relieved of administrative tasks and ensuing costs in areas not directly related to their specific research fields.
Specifically, the Life Science Zurich Graduate School aims:

- to increase the visibility and attractiveness of the LSZ-PhD programs world-wide in order to reach excellent undergraduates who consider doing a PhD in the life sciences
- to initiate the recruitment process to attract the best students internationally
- to improve the coordination of recruitment, avoiding redundant reviews of applicants
- to support the development of new PhD programs
- to improve the coordination of teaching for PhD programs with common areas of interest and/or curricula
- to support the PhD programs by providing a centralized course program in relevant transferable skills for all graduate students
- to provide support on career development for the graduate students; alumni of the LSZ GS should be equipped with the key attributes for successfully entering the competitive job market in the life sciences
- to identify and pursue new funding opportunities for the Graduate School and its member PhD programs (e.g. European funding, foundations, SNF)
- to ensure *quality* and *sustainability* of the services and products of the LSZ GS

The LSZ Graduate School: a family of PhD programs spanning the Life Sciences

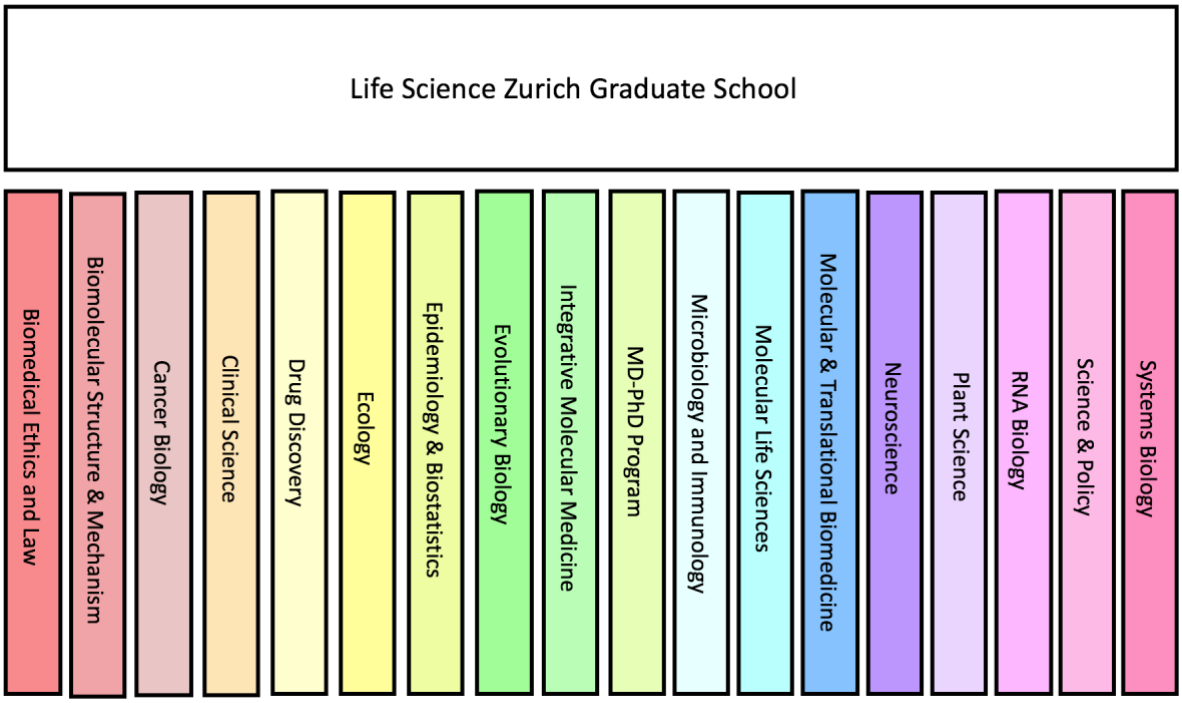


Figure 1: Chart of the LSZ Graduate School PhD programs

Numbers: ▪17 PhD program and 1 MD-PhD program ▪ over 575 research groups ▪ 1610 students

3.2.2 Strategy and products of the LSZ GS

The major units of the LSZ GS are:

a) LSZ GS Directors' Conference (program directors from each PhD program form the steering committee)
b) PhD programs
c) Graduate School office: administration

Table 1: Roles and responsibilities of the LSZ GS units

Unit	Roles and responsibilities
LSZ GS steering committee	• Strategic development of LSZ GS • Advice and support for the PhD programs and GS administration • Development of common criteria for quality assurance of the PhD programs • Promotion of relevant contacts within the scientific community of life sciences • Identification of common course needs • Development of a transferable skills curriculum • Identification and development of joint funding initiatives
PhD programs	• Evaluation and acceptance of students into the program • Development, implementation and funding of a discipline-specific graduate curriculum • Quality assurance • Fundraising for a specific PhD program • Tracking development of the students within each program • Funding flights and accommodation for interview candidates from abroad
Graduate School office	• Increasing visibility of the PhD programs world-wide • Advertising the graduate school and its recruitment procedure (advertisements on web platforms, posters etc.) • Coordination of the recruitment process (application forms, internal and external communication, i.e. information to PI and to candidates) • Organization of interviews • Funding for PR, the common application platform and the transferable skill courses • Development and maintenance of the LSZ GS web site for dissemination of information • Financial planning and financial controlling of the LSZ GS activities (esp. recruitment and courses) • Advice and support for the development of new programs (practical procedures, know-how transfer) • Fundraising for LSZ GS in areas *independent* of a specific research field (e.g. for common activities or for fellowships for students from a specific country) • Development and organization of a centralized Transferable Skills Course Program for all graduate students, including acquisition, commitment and support of internal and external facilitators, advertising the courses (GS web site) and coordinating sign-up • Support for the career development of graduate students (courses, activities, web-information) • Assurance of quality and sustainability of the services and products of the LSZ GS office • Exchange and collaboration with other units of the LSZ initiative • Exchange and collaboration with other graduate schools, both in- and outside of Zurich

3.2.2 a) LSZ GS Steering committee and participating PhD programs

Since May 2017, the Life Science Zurich Graduate School comprises seventeen PhD programs and a MD-PhD program. Each program is presided by a director, who generally represents the program in the steering committee (see list below). In 2017, this steering committee met twice in order to decide on the strategic orientation and development of the Graduate School. Since May 2014 in the position, Prof. Stephan Neuhauss, Institute of Molecular Life Sciences (UZH), presided the LSZ GS as chair until 1 July 2017. Prof. Eilika Weber-Ban, Institute of Molecular Biology and Biophysics (ETH) who was vice-chair until that date then took over the presidentship.

Table 2: Directors of the LSZ GS PhD programs

Program	Director
Biomedical Ethics and Law [medical track]	Prof. Nikola Biller-Andorno (Institute of Biomedical Ethics, UZH)
Biomolecular Structure and Mechanism (BSM)	Prof. Raimund Dutzler (Institute of Biochemistry, UZH)
Cancer Biology	Prof. Maries van den Broek (Institute of Experimental Immunology, UZH)
Clinical Science	Prof. Jean-Marc Fritschy (Institute of Pharmacology and Toxicology, UZH) Prof. Malcolm Kohler (Neuromuscular Center Zürich) Prof. Milo Puhan (Institute of Social and Preventive Medicine, UZH)
Drug Discovery	Prof. Michael Arand (Institute of Pharmacology and Toxicology, UZH)
Ecology	Prof. Owen Petchey (Institute of Evolutionary Biology and Environmental Studies, UZH)
Epidemiology & Biostatistics	Prof. Torsten Hothorn (Institute of Social and Preventive Medicine, UZH) Prof. Milo Puhan (Institute of Social and Preventive Medicine, UZH)
Evolutionary Biology	Prof. Kentaro K. Shimizu (Department of Evolutionary Biology and Environmental Studies, UZH)
Integrative Molecular Medicine (imMed)	Prof. Christian Grimm Division of Ophthalmology, USZ
MD-PhD Program	Prof. Adriano Aguzzi (Institute of Neuropathology, UZH) Prof. Alexandra Trkola (Institute of Medical Virology, UZH)
Microbiology & Immunology (MIM)	Prof. Leo Eberl (Institute of Plant Biology, UZH) Prof. Annette Oxenius (Institute of Microbiology, ETH)
Molecular Life Sciences (MLS)	Prof. Michael Hottiger (until December 2017) (Department of Molecular Mechanisms of Disease, UZH)

Program	Director
Molecular and Translational Biomedicine (MTB)	Prof. Christian Wolfrum (Institute of Food, Nutrition and Health, ETH)
Neurosciences (ZNZ)	Dr. Wolfgang Knecht (Institute of Brain Research, UZH)
Plant Science (PSC)	Prof. Samuel Zeeman (Institute of Agricultural Science, ETH)
RNA Biology (RNA)	Prof. Frédéric Allain (Institute of Molecular Biology and Biophysics, ETH)
Science and Policy	Prof. Ueli Grossniklaus (Institute of Plant Biology, UZH)
Systems Biology	Prof. Uwe Sauer (Institute of Molecular Systems Biology, ETH) Prof. Jörg Stelling (Department of Biosystems Science and Engineering, ETH

Program administrators, who are in charge of day-to-day affairs, normally also participate in steering committee meetings, although without voting rights. The following persons currently act as program administrators:

Table 3: Administrators of the LSZ GS PhD programs

Program	Administrator
Biomedical Ethics and Law [medical track]	Dr. Anna Elsner (until April 2017) Dr. Roberto Andorno (since April 2017) Michelle Heimgartner (Institute of Biomedical Ethics, UZH)
Biomolecular Structure and Mechanism (BSM)	Fabienne Fournichot Judita Tillova (since June 2017) (Institute of Biochemistry, UZH)
Cancer Biology	Dr. Eveline Bergmüller (until July 2017) Bettina Rausch (Institute of Molecular Cancer Research, UZH)
Clinical Science	Lisa Marxt (Dekanat, Medizinische Fakutlät, UZH)
Drug Discovery	Susanne Holliger (Institute of Pharmaceutical Sciences, ETH) Olga von Niederhäusern (Institute of Pharmacology and Toxicology, UZH)
Ecology	Dr. Debra Zuppinger-Dingley (Institute of Evolutionary Biology and Environmental Studies, UZH)
Epidemiology & Biostatistics	Dr. Eva Furrer (Institute of Social and Preventive Medicine, UZH)
Evolutionary Biology	Dr. Tony Weingrill (Anthropological Institute, UZH)

Program	Administrator
Integrative Molecular Medicine (imMed)	Heidi Preisig (ZIHP, UZH)
MD-PhD Program	Jacqueline Wiedler (Institute of Neuropathology, UZH)
Microbiology & Immunology (MIM)	Judith Zingg (Institute of Microbiology, ETH)
Molecular Life Sciences (MLS)	Dr. Susanna Bachmann (Institute of Molecular Life Sciences, UZH)
Molecular and Translational Biomedicine (MTB)	Alexandra Bünder (since February 2017) (Competence Center Personalized Medicine, UZH & ETH)
Neurosciences (ZNZ)	Heidi Gauss (Neuroscience Center Zurich, UZH & ETH)
Plant Science (PSC)	Dr. Melanie Paschke, Dr. Carole Rapo (Institute of Plant Science, ETH)
RNA Biology (RNA)	Isabelle Allen (Institute of Molecular Biology and Biophysics, ETH)
Science and Policy	Dr. Luisa Last (Institute of Plant Science, ETH)
Systems Biology	Dr. Andrea Huber Brösamle Swantje Pless (since April 2017) (Department of Biosystems Science and Engineering, ETH)

Graduate School student body 2017

Details of each program are published in appendix 3.

Total numbers as of 31 December 2017	
Total students	1,560
Affiliated at UZH	970
Affiliated at ETH	550
Other affiliation	40
Track I students	649
Track II students	911
Female students	857
Male students	703
International students	1,132
Swiss students	428
Program drop-outs	30
Completed PhD	282
Program alumni	2,564

3.2.2 b) Graduate School office

Since 1 April 2006, the Graduate School has its own administrative office. Dr. Susanna Bachmann is employed on a part-time basis of 40% and attends the day-to-day business of the LSZ GS. Since June 2011, Helen Stauffer is working as assistant for Life Science Zurich. She dedicates about 25% of her employment to the LSZ GS.

The school administrator attended the 10th EUA-CDE Workshop on “Ethics and Integrity in Doctoral Education and Research Training” at the Universidade NOVA de Lisboa on 18-19 January 2017. She was elected to give a talk entitled “Marathon or steeplechase: Introducing a Scientific Integrity Course within the Life Science Zurich Graduate School” in the session “Training early-stage researchers”.

3.3. Activities

3.3.1 Recruitments

For both recruitment rounds in 2017, applicants of the Indian subcontinent (India, Pakistan and Bangladesh) formed the largest group (approximately 1/4 of all applicants for the July and the December deadline), followed by students from Italy, Iran, Germany and China in varying order for the two deadlines. For a detailed overview of the applicants' nationality please see Appendix 1.

Table 4: Applications per PhD program in 2017

Complete applications of LSZ GS per PhD program			
	1 Dec. 2016	1 July 2017	1 Dec. 2017
Biomedical Ethics and Law (med. Track)	0	3	0
Biomolecular Structure and Mechanism	43	51	40
Cancer Biology	171	191	169
Clinical Science	*	*	25
Drug Discovery	59	78	58
Ecology	47	32	35
Epidemiology & Biostatistics	52	42	43
Evolutionary Biology	21	21	20
Integrative Molecular Medicine	24	24	16
Microbiology and Immunology	173	153	157
Molecular Life Sciences	186	159	138
Molecular and Translational Bio-medicine	76	60	46
Neuroscience	140	145	137
Plant Science	102	64	59
RNA Biology	20	25	10
Science and Policy	17	19	16
Systems Biology	65	57	58
TOTAL	**1,196**	**1,124**	**1,027**

After the absolute peak of 1,733 applications in December 2013, the numbers of applications dropped considerably in 2014 to 1,400 (1 July 2014) and 1,159 (1 December 2014) and rose again in the following year to 1,423 (1 July 2015) and 1,244 (1 December 2015). This pattern with roughly 200 applications more for the summer than the winter deadline continued in 2016 but stopped in 2017 with continuously dropping numbers of applications and only slight differences between the summer and winter deadlines. Although there is a considerable difference in the number of applications between the individual programs, some of them start to experience difficulties in inviting sufficient applicants for

the positions they can offer. In fact, more and more programs fail to meet the Graduate School's goal of inviting two students for each open position. Moreover, for the December deadline we even invited a bit less than one applicant for each offered project (99 slots and 136 applicants for the July and 121 positions and 110 applicants for the December deadline). This is due to the fact that on the one hand the quality of applications varies considerably and on the other hand our budget does not allow us to invite dozens of candidates from overseas. If one takes into account that many renowned European universities have set up PhD programs and Graduate Schools in recent years, it is understandable that we do have difficulties to recruit sufficient candidates from Europe. Furthermore, the economy is again prospering in many countries, which might make it less attractive for the younger generation to opt for a PhD abroad. Whatever the reasons for the drop of applications, it is clear that we have to work on our marketing strategies and to find appropriate ways how to make the LSZ GS better known among Master graduates and encourage them to apply.

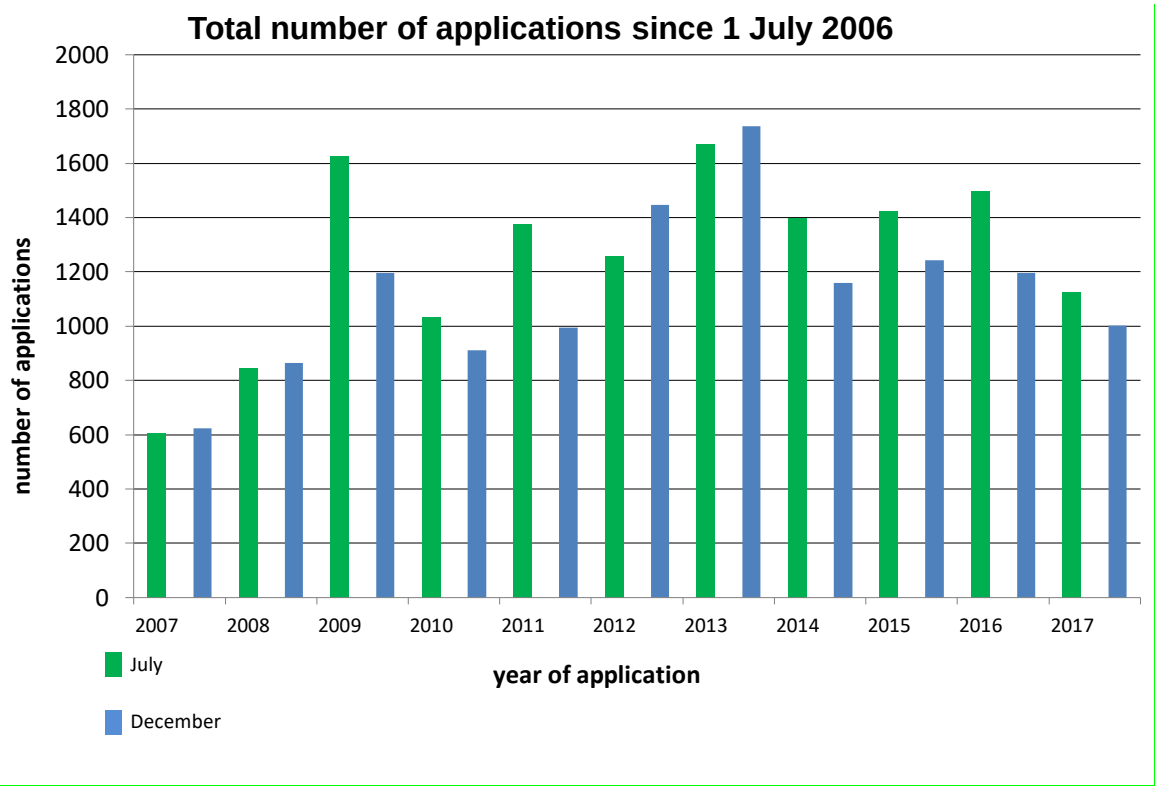


Figure 2: Total number of applications since 1 July 2006.

The trend we observed in the past years with the female students slowly but steadily catching up in number with the male applicants (in 2016, 50% female applicants for the deadline in July and 55% for the one in December) continued in 2017. In fact, in July 55% of the applicants were female and 53% in December. As for the past recruitment rounds, we invited more female than male candidates for an interview, the ratio was over 3:2 in July and 5:4 in December. Most of the applicants learned about the program from the internet (from our own web page or ads on different recruiting web sites). As in former years, applicants also learned about the program from friends who have once applied to the LSZ GS or who are performing their PhD in one of the programs. The poster as a recruiting tool continues to lose importance compared to the other marketing tools. In fact, we have reduced the number of distributed posters but have not yet given it up completely.

Following review of the written applications by the admission committees of the different programs, the top 11% (December) to 12% (July) of applicants were invited to Zurich for an interview and lab visits. About half of the interviewed candidates was offered a position in Zurich, underscoring the fact that a selection based solely on written applications would not be sufficient to insure a high-quality student body. In the winter round, 8% of the accepted candidates rejected a position offered by our group leaders. In contrast, with only 4% this ratio was considerably lower in summer. The drop-out rate was

22% for the December deadline and 19% for the July deadline, which is in the higher range of the average of former recruitment rounds (15-20%). The matching rate of 48-52% is exactly the same as in 2016 and thus a bit lower than in former years. However, we still consider it to be satisfying. Many of the students who turned down our offer probably joined other very strong programs in Europe or in the US.

Table 5: Recruiting statistics in 2017

LSZ GS recruiting statistics			
	Dec. 1, 2016	July 1, 2017	Dec. 1, 2017
Complete applications	1,206	1,124	1027
Invited candidates	168	168	148
Drop-outs before interview	36	32	*
Candidates at interview	132	136	*
Free slots	114	99	121
Matches	63	70	*
Candidates without matches	42	50	*
No list handed in	12	6	*
Decision against LSZ GS	11	5	*
Rejected candidates	4	5	*

*data will be included in 2018 annual report

In December 2017, we managed to fill 55% of the open positions whereas with 69% this ratio was a bit more successful in July 2017. However, these rates correspond to the average of the last years. Although in general the matching process is satisfactorily, we are aware that it is a very sensitive part of the whole recruitment process. As the number of applicants has, very obviously, been decreasing in 2017, there is at the moment no need to organize the recruitments differently or to add a third round.

Because not all open positions can be filled during a given recruiting round and some outstanding applicants don't want to wait for 6 months, if they have just missed an application deadline, all programs also accept "track II" candidates. Track II students are students who have applied independently to (and have been accepted by) a group leader who is a member of a specific PhD program. This more traditional way of recruiting students is more pronounced in some programs than in others. Currently, about 3 out of 5 students are hired via track II. Applications of track II students are administrated directly by the different programs.

3.3.2 Data systems and web site

2017 was the first year of consolidation in respect to the database “DissGo” (for “Dissertation Go!”). Some programs added their program-specific activities, such as courses, retreats or tutorials and we eventually introduced a “Notes” Tab, which has been quite a while on our wish list. Towards the end of the year the “PhD Process Tab” was completely redesigned and renamed as “Milestones”. This tab now shows upcoming deadlines and an overview of all milestones arranged by type (activities, research proposal, doctoral agreement, thesis committee meeting) in table format with the indication of the current status (pending, obsolete, completed, approved). Only by clicking on the title of the milestone the singular milestone will open up for edition or the download of documents.

The database is by now a well-established tool and has become quite indispensable for PhD students as well as program coordinators. Regrettably, it is still scarcely used by the PIs and the general administration involved in the doctorate. We hope that this will change in the near future as we are still convinced that DissGo is an excellent tool to monitor the PhD process and to help us keeping an eye on the quality of supervision. And we are not any longer the only Graduate School of the University using DissGo: in summer 2017, the PhD program in Economics joined and we hope that more programs, graduate schools or faculties will follow in the near future!

As mentioned in last year’s report, the director conference had decided in November 2016 that the Graduate School should give up the application tool and instead rent the application platform Glowbase is having on the market for several years already. Fortunately, in spring 2017 the Graduate Campus of the University of Zurich approved our funding request of CHF 21,000 for the one-time adaption of the rented platform to our specific requirements. We had decided to switch to the new platform after the deadline of 1 December 2017 to have enough time to prepare the transition with care. However, in order to test the new data base the PhD program in Clinical Science, which had been accepted to the LSZ GS in May 2017, volunteered to test the new platform and started using it as of September 2017. So far, the entire application process ran very smoothly and on 2 December 2017 we linked our application pages to the new platform. The real test of the new platform will only happen in July 2018 when all the programs will use it for the first time and we will have to handle approximately 1,000 complete applications. Nonetheless, we have already noticed one of the most remarkable advantages of the new platform: Incomplete applications are “invisible” to the program coordinators and the applicant has to actively submit his or her application once it is complete. Thus, the program coordinator cannot support the applicant in preparing his or her application, since the correction of email addresses or the upload of documents have to be done by him- or herself. This little change relieves the program coordinators from a lot of time consuming and tedious work and also reduces the email exchange between the program and the applicants to a minimum.

After the complete revision of the web pages in 2016, no major adaptions were made in 2017. We only gave a slight face lift to the “Application” page, as it is usually used as landing page in the ads and campaigns we publish around our recruitment deadlines. One of the campaigns also proved clearly that most of the interested visitors use a mobile device, such as a smart phone or tablet, to access our pages. Unfortunately, the web pages as well as the application platform are mainly designed for the use on computers and we are aware that we should make them more mobile-friendly, as we expect this form of access to further increase in the coming years.

3.3.3 Transferable skills courses

Besides the centralization of the application process, one of the main motivations to found the Graduate School was to offer common courses, which are not related to the specific scientific focus of a program. In 2017, the LSZ GS offered a total of 40 courses, 13 of them were organized by a program (or another university institution such as the Functional Genomics Center Zurich, the Center for Microscopy and Image Analysis, etc.) but were open for all students of the LSZ GS. 10 courses were offered by in-house staff and thus not liable to costs. The program administrators agreed on the following policy for joint courses: the organizing program obtains a quarter of the seats for its own students, if the LSZ GS bears the entire course costs. Should the program need more seats, the LSZ GS reduces its financial support accordingly.

Whereas in the beginning the programs offered very similar courses via the LSZ GS, mainly statistics, ethics and scientific writing, the variation of the topics increased in the past years. However, the program currently includes several courses that, strictly speaking, cannot be subsumed under the category “transferable skills” as to a great extent they are methodical courses, such as the Next Generation Sequencing course, the Microscopy Toolbox and the Matlab course. These courses are in high demand and it is unquestionable that they should be offered to the PhD students of the LSZ GS. However, should the inclusion of such courses increase in the future we might have to think of renaming the course program.

As in past years, most of the courses were completely booked or even over-booked. Only five courses had to be cancelled due to lack of interest. Students really seem to appreciate and take advantage of attending courses that are not directly linked to their research field, but help them to prepare for future leadership functions.

Table 6: Courses offered by the LSZ GS January to December 2017

Transferable skills courses for PhD students	Number of courses	Number of participants	UZH affiliation (+ USZ/Kispi)	ETH affiliation	other
Best scientific practice & ethics	**6**	**190**	**124**	**60**	**6**
Ethical issues in Biological Research	1	20	9	10	1
Ethics for (Neuro)Scientists	1	11	10	1	
Responsible Conduct in Research	1	9	7	2	
Scientific Integrity introductory course	3	150	98	47	5
Communication & presentation skills	**6**	**74**	**50**	**23**	**1**
Convincing and Debating	1	11	9	2	
Logic and Reasoning for Scientists	1	16	12	4	
Presenting Skills	3	33	22	11	
Filmmaking for Scientists	1	14	7	6	1
Methodical skills	**5**	**62**	**45**	**14**	**3**
Matlab	1	12	8	4	
Microscopy Toolbox	1	27	22	5	
NGS DNA / RNA Sequencing	3	23	15	5	3
Scientific writing & publishing	**9**	**145**	**90**	**51**	**4**
Dealing with the publication process	1	7	3	4	
Preparing to Postdoc	2	47	29	16	2
Scientific Writing	4	74	44	28	2
Winning the publication game	1	13	11	2	
Writing a postdoctoral grant	1	4	3	1	

Transferable skills courses for PhD students	Number of courses	Number of participants	UZH affiliation (+ USZ/Kispi)	ETH affiliation	other
Social & self-management skills	**14**	**157**	**112**	**44**	**1**
BioEntrepreneurship & Innovation: From Scientist to BioEntrepreneur. Creation of a marketable product (Module A+B)	3	39	26	13	
Career cornerstones	1	12	8	4	
Competency Awareness	2	23	14	9	
First Steps into Teaching at the University	1	6	6		
Managing Difficult Working Relationships	1	11	8	2	1
Project Management (advanced stage researchers)	1	15	10	5	
Selfmarketing skills	1	12	8	4	
“Start” TutorInnenqualifikationen (in German)	1	7	6	1	
Successful start of professional career	2	29	24	5	
Supervising students – dealing with roles and relationships	1	3	2	1	
Total of all courses	**40**	**628**	**421**	**192**	**15**

3.4 Assessment by Advisory Board

On 19 and 20 October the advisory board paid the LSZ GS a fifth visit. Sally Leevers (Cancer Research UK, London Research Institute, UK), Mariken de Krom (Rudolf Magnus Institute of Neuroscience, UMC Utrecht, NL) and Isabel Roditi (University of Berne) assessed the PhD programs in Biomedical Ethics and Law (Medical Track), Epidemiology and Biostatistics as well as Cancer Biology - the first program to be evaluated a second time. Each visit lasted half a day and the advisory board was not only given the opportunity to talk to faculty members but also to program students. On the first morning of the visit, the administrator of the LSZ GS met with the board to give them an update on the current situation of the LSZ GS and to discuss which of their recommendations from the last visit were already implemented.

The advisory board judged the Graduate School to be firmly established and well organized. All in all, they did not address any specific area of improvement but pointed out some critical points. One of the evaluated programs is very small and the LSZ GS might want to consider to define a critical mass regarding numbers of students, PIs and faculty members with “Promotionsrecht”. Also, they found that some students were not aware that the increase of the teaching load was not a directive from the programs. Further misunderstandings concern the meaning of the 60% protected time stipulation from the SNF. In both cases, the board recommends the Graduate School to provide better and more detailed information. The whole report can be found in the Appendix 4.

3.5 On-going projects

Since the LSZ GS has by now used up all the funds provided for the development of DissGo, we can currently not further extend the database. At this moment, it is not clear whether the Faculty of Arts and Social Sciences (UZH) would like to use DissGo for the faculty-wide monitoring of the PhD students or whether there is even a chance that DissGo will be made available for all programs or graduate schools at the university. If this should be the case, we expect sooner or later some extensions to be added, first and foremost the teaching obligations, which we still were not able to add. Furthermore, the financial support the Graduate School obtained in 2017 via swissuniversities (formerly SUK) to implement the doctoral regulations of other UZH faculties (namely the Faculty of Arts and Social Sciences), ETH departments and the universities of Basel and Berne will be continued in 2018. Although we are not actively looking for other PhD programs that are interested in renting "DissGo", we are still convinced that the database is utterly helpful for other graduate schools and we would therefore be happy to let it to other institutions or partners.

Switching to the new application platform will definitely keep us busy also in the first half of 2018. Besides the training for the coordinators to make them acquainted with the new tool, we will have to provide access to the platform for the approximately 570 Principle Investigators, who are affiliated with the LSZ GS. Despite the fact that we are already using the tool since 2 December 2017, we will still need to implement many features the tool currently does not have but we will need in order to organize the lab visits in September 2018.

As in 2017, we plan to hold the introductory lecture on “Scientific Integrity and Good Scientific Practice” by Dr. Anna Deplazes Zemp three times for 50 or slightly more participants. Of course, we will add a fourth round, if need be. Currently, the lecture is mandatory for the doctoral students of 10 PhD programs and we hope that more programs will declare it as compulsory. Moreover, as the ETH prolonged the financial support for the lecturer via funding from swissuniversities for the next years, the Graduate School does not yet have to finance the lecture through its budget for the transferable skills program.

3.6 Finances

As in past years, the directors’ conference worked out a distribution key (see Appendix 2) to allocate the funds obtained from ETH (CHF 300,000) and UZH (CHF 400,000) to the LSZ GS. Since the distribution of the funds per capita would have been very disadvantageous for the smaller programs, the directors’ conference agreed on paying each program a fix allowance besides the per capita contribution. In order not to penalize the bigger programs, the allowance is slightly graded (CHF 5,000 for programs with up to 10 students, CHF 10,000 for programs with 10-20 students and CHF 14,000 for programs with more than 20 students). As in previous years and in order not to encourage a long duration of the PhD, the LSZ GS only financed students until the end of their 4th year. This means that the programs obtain the same amount of money for all students, irrespective of how long it takes them to complete their PhD.

Besides the PhD programs in Biomedical Ethics and Law and the MD-PhD program that are financed via the Medical Faculty, the PhD program in Drug Discovery and the newly affiliated program in Clinical Science are also not included in the above-mentioned distribution key (the latter also being affiliated with the Medical Faculty). The RNA Biology program obtains financial support from the NCCR RNA Biology and thus asks the Graduate School to pay only for the per capita fee of its PhD students but not for the allowance, which is covered by the NCCR. Although the student body is at the moment not further growing (from 1,257 funded PhD students in 2016 it dropped to 1,200 in 2017), the funds for most programs have decreased over the past years because of the addition of new programs

and the continuous growth of the student body. Especially those programs that obtained a considerable share of swissuniversities money in the last years are facing serious funding problems because the distributed funds are going to decrease year by year and will run out completely after 2020.

In 2017, the LSZ GS prepaid accommodation, travel as well as the general recruiting costs, such as publicity, provisions and public transport. Apart from the publicity, the individual PhD programs are billed for the entire recruitment costs, once it is clear which program the recruited students will join.

Annual Account LSZ Graduate School 2017

Earnings 2017	CHF
Contribution UZH/Bologna	40,200
Contribution ETH	117,800
One-time contribution GRC application platform	21,000
One-time contribution GRC courses	33,600
SUK GRC (contribution 2017 and carry-over 2016)	10,570
SUK ETH (Scientific Integrity)	3,000
Reimbursement recruitment costs PhD-programs (Sep. 2016 & Feb. 2017)	150,617
Annual support MD-PhD program	3,000
Surcharges courses	2,085
Total earnings	**381,872**

Costs 2017	CHF
Recruitment rounds (Feb. & Sep. 2017)	163,485
Transferable skills course program	90,027
DissGo database	19,199
Computer-Services: old and new application tool, servers, etc.	28,453
Marketing (ads, listings, poster)	15,732
Salary administrator	47,110
Conference attendance & further education school administrator	731
Site visit Advisory Board	8,474
Overhead	4,336
Total costs	**377,547**

Balance as of 31 December 2017	4,325

The social benefit costs for Susanna Bachmann (CHF 10,065) were covered by the Faculty of Science of the UZH.

Life Science Zurich Graduate School: Recruitment costs 2017 in CHF

	February (127 Stud.)	September (134 Stud.)
On-site costs	**CHF**	**CHF**
Public transport	3,353	2,178
Student party	7,204	7'898
Lunch vouchers	3,510	3,277
Snack	5,752	6,307
Total	**19,819**	**19,660**
Costs per student	156	147

	February (104 Stud.)	September (106 Stud.)
Travel & accommodation costs for external students	**CHF**	**CHF**
Accommodation	28,380	29,521
Travel costs	27,132	38,973
Total	**55,512**	**68,494**
Costs per student	534	646

Total costs recruitment	75,331	88,154

3.7 Outlook

Regrettably, the financial situation of the Graduate School and its programs has not yet changed and it is to expect that it will get tenser in future years. In 2017, most of the PhD programs as well as the LSZ GS received slightly less money than in 2016 and the years before. Although the funding via swissuniversities will not stop immediately, for several programs the financial situation is becoming already critical with the current cuts and also the Graduate School might face some financial problems in the coming years. Especially the costs for renting the application platform and the general maintenance costs of DissGo might considerably strain the budget.

The Graduate School should take care of this situation and start to look for possibilities to secure the funding in the future. Since the number of the doctoral students affiliated with ETH remained surprisingly stable in contrast to the UZH PhD student body that still continues to increase, the LSZ GS should probably first meet with the authorities of the University of Zurich. The support of the UZH should at least be increased to an extent that the per capita support equals the support offered by ETH. Ideally, the Graduate School will manage to obtain not only funding from the Faculty of Science but also from the Faculty of Medicine where many of the UZH PhD students carry out their PhD. In addition, the LSZ GS should of course also look for other national and international funding sources.

Another sphere of action, which might demand more attention is the recruitment of doctoral students. Should the number of complete applications further drop in 2018 and the majority of the programs not be able to invite in average 1.5 - 2 candidates for each open position, the Graduate School will have to seriously reassess their recruiting and marketing strategies. It is obvious that this won't be an easy task to tackle, particularly in times of budget restraints.

Appendix 1: Statistics intake rounds

Table 1: LSZ GS Intake round July 1, 2017

Sex	*Not invited*	*Invited*	*Total*
Female	541	94	635
Male	479	42	521
		136	1156
Knowledge of program			
Internet	669	72	741
Poster	20	6	26
Friends	307	79	386
Ad	34	4	38
Other	52	10	62
Country of origin			
Albanian	5	1	6
Algerian	1	0	1
American	10	1	11
Argentinian	1	0	1
Armenian	1	0	1
Austrian	12	4	16
Bahraini	1	0	1
Bangladeshi	12	0	12
Belgian	1	1	2
Belorussian	1	0	1
Beninese	1	0	1
Bosnian	1	0	1
Brazilian	9	0	9
Briton	23	4	27
Bruneian	1	0	1
Cameroonian	3	0	3
Canadian	3	2	5
Chinese	49	3	52
Colombian	6	1	7
Congolese	1	0	1
Costa Rican	1	0	1
Croatian	1	0	1
Cypriot	2	0	2
Czech	2	0	2
Dane	1	0	1
Dutch	13	5	18
Ecuadorean	5	0	5
Egyptian	25	1	26
Eritrean	1	0	1

Estonian	1	0	1
Ethiopian	16	0	16
Filipino	4	0	4
French	19	2	21
Gambian	1	0	1
Georgian	1	0	1
German	40	22	62
Ghanaian	14	0	14
Greek	24	5	29
Grenadian	0	1	1
Hungarian	3	0	3
Indian	234	11	245
Indonesian	7	0	7
Iranian	87	2	89
Iraqi	2	0	2
Irish	4	0	4
Israeli	0	1	1
Italian	73	17	90
Japanese	2	0	2
Jordanian	4	0	4
Kazakh	0	2	2
Kenyan	3	0	3
Korean	2	2	4
Latvian	0	2	2
Lebanese	7	0	7
Libyan	1	0	1
Lithuanian	1	1	2
Macedonian	1	0	1
Malaysian	10	0	10
Maltese	1	0	1
Mexican	6	1	7
Moldovan	1	0	1
Mongolian	2	0	2
Montenegrin	1	1	2
Moroccan	2	0	2
Nepalese	5	1	6
New Zealander	1	0	1
Nigerian	32	0	32
Norwegian	1	0	1
Pakistani	27	1	28
Palestinian	2	0	2
Peruvian	2	0	2
Pole	16	2	18
Portuguese	17	1	18

Romanian	5	0	5
Russian	11	4	15
Saudi Arabian/Saudi	1	0	1
Scottish	2	0	2
Serb/Serbian	7	2	9
Slovak	0	1	1
Slovene/Slovenian	2	0	2
South African	2	0	2
Spanish/Spaniard	13	5	18
Sri Lankan	5	2	7
Sudanese	5	0	5
Swede	2	2	4
Swiss	13	16	29
Taiwanese	10	0	10
Thai	6	0	6
Trinidadian/Tobagan	1	0	1
Tunisian	1	0	1
Turk	26	5	31
Ugandan	6	0	6
Ukrainian	4	0	4
Uzbek	1	0	1
Venezuelan	2	0	2
Vietnamese	5	0	5
Welsh	2	0	2
Yemeni	2	0	2
Yugoslav	1	0	1
Zambian	1	0	1
Zimbabwean	6	0	6

Table 2: LSZ GS Intake round December 1, 2017

Sex	*Not invited*	*Invited*	*Total*
Female	478	62	540
Male	410	48	458
Knowledge of program			
Internet	531	55	586
Poster	29	5	34
Friends	361	76	437
Ad	20	2	22
Other	46	4	50
Country of origin			
Albanian	1	0	1
Algerian	7	0	7
American	15	4	19
Argentinian	2	0	2
Armenian	1	0	1
Austrian	5	8	13
Azerbaijani	1	0	1
Bangladeshi	9	0	9
Belgian	2	2	4
Belorussian	0	1	1
Brazilian	12	1	13
Briton	21	1	22
Bulgarian	2	0	2
Burundian	1	0	1
Cameroonian	5	0	5
Canadian	2	0	2
Chadian	1	0	1
Chinese	58	4	62
Colombian	6	1	7
Costa Rican	1	0	1
Croatian	4	0	4
Cypriot	2	0	2
Czech	1	1	2
Dutch	15	2	17
Ecuadorean	2	0	2
Egyptian	21	0	21
Estonian	2	1	3
Ethiopian	8	0	8
Filipino	5	0	5
Finn	1	0	1
French	6	4	10

German	30	26	56
Ghanaian	12	0	12
Greek	22	2	24
Grenadian	1	0	1
Hungarian	0	1	1
Indian	227	4	231
Indonesian	10	0	10
Iranian	59	0	59
Irish	2	0	2
Israeli	1	1	2
Italian	33	14	47
Jamaican	1	0	1
Japanese	1	0	1
Jordanian	3	0	3
Kazakh	2	0	2
Kenyan	5	0	5
Korean	3	0	3
Latvian	1	0	1
Lebanese	7	2	9
Libyan	1	0	1
Luxembourger	1	1	2
Macedonian	2	0	2
Malaysian	8	0	8
Maltese	1	0	1
Mauritian	1	0	1
Mexican	14	0	14
Mongolian	1	0	1
Moroccan	3	0	3
Mozambican	1	0	1
Nepalese	4	0	4
New Zealander	1	0	1
Nigerian	24	0	24
Norwegian	1	0	1
Omani	3	0	3
Pakistani	21	0	21
Palestinian	2	1	3
Peruvian	1	0	1
Pole	13	7	20
Portuguese	7	2	9
Romanian	4	0	4
Russian	9	4	13
Rwandan	2	0	2
Saint Lucian	1	0	1
Saudi Arabian/Saudi	2	0	2

Scottish	1	0	1
Serb/Serbian	5	1	6
Sierra Leonian	1	0	1
Singaporean	1	0	1
Slovak	2	0	2
Slovene/Slovenian	2	0	2
South African	7	0	7
South Korean	2	0	2
Spanish/Spaniard	21	3	24
Sri Lankan	2	0	2
Sudanese	1	0	1
Swede	1	1	2
Swiss	14	7	21
Syrian	2	0	2
Taiwanese	15	1	16
Tanzanian	3	0	3
Thai	3	0	3
Togolese	2	0	2
Turk	15	2	17
Turkmen/Turkoman	1	0	1
Ugandan	5	0	5
Ukrainian	2	0	2
Uruguayan	1	0	1
Vietnamese	2	0	2
Yemeni	1	0	1
Zambian	1	0	1
Zimbabwean	3	0	3

Appendix 2: Financial distribution key

Financial support of ETH and UZH in 2017								
Annual contribution ETH: 300'000 CHF Annual contribution UZH: 400'000 CHF Total contribution: 700'000 CHF			Allowances: up to 10 students: CHF 5,000 11-20 students: CHF 10,000 more than 20 students: CHF 14,000					
Programs	**Allowance**	**ETH students**	**UZH (MNF) students**	**Other uni/ faculty**	**Students total**	**300 CHF per student**	**Total amount**	**Total rounded**
Biomedical Ethics and Law								
Biomolecular Structure and Mechanism	14,000	23	35		58	17,400	31,400	31,400
Cancer Biology	14,000	12	114		126	37,800	51,800	51,800
Ecology	14,000	10	34		44	13,200	27,200	27,200
Epidemiology & Biostatistics	14,000		37		37	11,100	25,100	25,100
Evolutionary Biology	14,000	1	76		77	23,100	37,100	37,100
Integrative Molecular Medicine	14,000	2	97		99	29,700	43,700	43,700
MD/PhD		Students participate and are counted in other programs					0	0
Microbiology & Immunology	14,000	70	113		183	54,900	68,900	68,900
Molecular Life Sciences	14,000	51	89		140	42,000	56,000	56,000
Molecular and Translational Biomedicine	14,000	41	9		50	15,000	29,000	29,000
Neuroscience	14,000	62	136	*22*	198	59,400	73,400	73,400
Plant Science	14,000	40	32	*11*	72	21,600	35,600	35,600
RNA Biology		8	6	*14*	14	4,200	4,200	4,200
Sciences and Policy	14,000	23	14	*6*	37	11,100	25,100	25,100
Sytems Biology	14,000	57	8		65	19,500	33,500	33,500
TOTAL CHF	182,000	400	800	*53*	1,237	360,000	542,000	542,000

Life Science Zurich Graduate School 158,000 (= approx. 1,200 x 131.65 CHF)

This support covers 1st - 4th year of PhD

Appendix 3: Graduate School student body 2017

As of 31 December 2017	Total students	Affiliated at UZH	Affiliated at ETH	Other affiliation	Track I students	Track II students	Female students	Male students	International students	Swiss students	Program drop-outs	Completed PhD.	Program Alumni
Graduate School total	1560	970	458	40	649	911	857	703	1132	428	30	282	2564
Biomolecular Structure & Medicine	77	42	35	0	34	43	28	49	59	18	2	10	91
Cancer Biology	121	106	15	0	82	39	80	41	94	27	4	36	105
Drug Discovery	9	6	3	0	3	6	6	3	8	1	0	0	0
Ecology	68	16	52	0	13	55	42	26	51	17	1	11	167
Epidemiology & Biostatistics	46	46	0	0	19	27	29	17	30	16	2	7	14
Evolutionary Biology	91	89	2		12	79	49	42	64	27	3	36	90
Integrative Molecular Medicine	108	106	2	0	55	53	66	42	73	35	3	24	191
Microbiology & Immunology	208	134	74	0	97	111	132	76	150	58	4	36	242
Molecular Life Sciences	178	110	68	0	103	75	99	79	133	45	2	40	414
Molecular & Translational Biomedicine	64	12	52	0	34	30	33	31	49	15	1	8	107
Neuroscience	302	208	92	2	72	230	147	155	200	102	n.a.	31	607
Plant Science	120	-	-	13	25	95	59	61	87	33	3	21	490
RNA Biology	41	-	-	21	14	27	23	18	29	12	0	-	-
Sciency & Policy	48	-	-	4	24	24	24	24	37	11	4	14	19
Systems Biology	79	14	65	0	62	17	40	39	68	11	1	8	27

Appendix 4: Advisory Board Review

Advisory Board Review of Life Science Zurich Graduate School and PhD Programmes in Biomedical Ethics and Law/Medical Track, Cancer Biology, and Epidemiology and Biostatistics

October 2017

We (the advisory board, AB) found our visit well-organised and interesting, and enjoyed meeting with the various members of the Graduate School and the three Programmes that we reviewed.

The Graduate School is now firmly established and appreciated by faculty and students alike as providing an important structure spanning ETH and UZH for the recruitment, training and support of Life Science Zurich PhD students. The Graduate School attracts high quality students from across the world, and provides the framework for them to receive first class training and research opportunities while carrying out their PhD research.

Below we have summarized our general comments relating to the Graduate School and all the Programmes that we saw, followed by specific comments relating to the three Programmes that we reviewed.

- The AB was delighted to see that DissGo has come to life and is clearly providing an invaluable tool for the Programme Coordinators, and a valued resource for the students. Supervisor engagement was more limited, but also less necessary. The system was clearly a worthwhile investment that has streamlined the admin required to operate PhD Programmes and a Graduate School on this scale.
- The AB was also pleased to see that the 2-hour scientific integrity course runs regularly, and is mandatory for 10 of the school's Programmes. We strongly encourage the remaining Programmes to include it in their curriculum.
- Likewise, thesis committees seem to be truly embedded across the Programmes that we reviewed. We did not encounter any students without committees, and those who we spoke to clearly valued their committee's advice and expertise. The timing of the first meeting continues to vary, and often to be later than recommended – the AB advises that this meeting should take place no later than 9 months after starting. We also note that an earlier first thesis committee meeting can be highly useful in providing a forum for students to discuss and receive advice on their project as it is being developed, rather than a forum to present data and progress. Indeed we did encounter students who had benefited in this way from having a first meeting 3 months after starting.
- There was also increased awareness of the Graduate School and the opportunities that it provides amongst students and staff, and a better understanding of the PhD Programmes in general.
- We noted that one of the Programmes that we reviewed was particularly small. While we appreciated that university students are required to be members of a PhD Programme, the Graduate School might want to consider introducing guidelines on an appropriate critical mass for a PhD Programme, including the numbers of students, PIs and faculty members with 'Promotionsrecht'.
- The Directors of 2 Programmes mentioned that using track 1 to recruit students presents difficulties with respect to the timing of SNF funding.

Following discussion, we understand that this timing is dictated, at least in part, by practical considerations and the start of the academic year.

- The Graduate School mentioned that their funding from UZH and ETH has remained static while the number of students has increase significantly. It would be reasonable to consider increasing the financial contribution, perhaps with some of it provided on a per capita basis.
- For PhD Programmes with a broader scientific remit that, for example, spans both basic and clinical research, the AB recommends ensuring that thesis committees include both clinical and basic scientists, to provide students with appropriate expertise and guidance. Likewise, committees should have experienced as well as more junior members on them. The Graduate School may want to recommend some oversight of thesis committee composition by Programme Directors as 'good practice'.
- There was considerable discussion with students and supervisors about the teaching load for some students, and a misunderstanding that increased requirements were being made by the Programmes. We recommend ensuring that students understand where these directives come from, and that they are supported to obtain appropriate training and guidance on how to manage their teaching responsibilities.
- Students on two of the Programmes that we met had misunderstood the meaning/intention of the 60% protected time stipulation from the SNF, and we recommend clarifying what this means to students.
- We noted that students are sometimes reluctant to raise concerns or difficulties with their thesis committees and wondered whether there might be an opportunity for students to seek advice from a nominated 'ombudsperson/mentor' from another Programme within the Graduate School.
- Overall we remain impressed by the operation and status of the Graduate School, with its high visibility, international profile and ability to attract outstanding students. The Coordinator and Director are to be congratulated for their commitment and achievements.

Biomedical Ethics and Law/Medical Track (BmEL) PhD Programme Strengths

- This Programme addresses an important and timely area of research, and is clearly highly valued by the students.
- In particular, students appreciated the knowledge base, the freedom and opportunities offered by the Programme, the facilities, and the fact that the Programme was flexible and accommodating with respect to family commitments, part-time jobs etc.
- Students also valued the lack of hierarchy that they encountered - it was great to hear that students felt that they could approach anyone to discuss anything, and that they made the most of this opportunity.
- We noted that the Programme would be prepared to organise a transferable skills course in bioethics, which we recommend they discuss with the Graduate School.

Opportunities / Areas for improvement

- While we appreciate that there has been a high turnover of Coordinators on this Programme, we felt that the students and Programme Coordinators and Director were not well-informed about the Graduate School and the opportunities that it provides, for example, DissGo and the transferable skills courses. In addition, not all students were aware of who the current Coordinator was. We recommend that the Programme organisers engage fully with the Graduate School office to familiarise themselves with what is on offer and ensure that students do not miss out.
- We noted a lack of awareness amongst students of key information, particularly at the

beginning of their PhD, for example PhD structure and processes, DissGo, expectations of PhD students, of supervisors and of thesis committees, recommended frequency of contact, training possibilities etc. The AB felt this should be relatively easy to address by an orientation meeting/checklist for new students, plus organises update meetings to inform students of any significant changes. Current students could provide advice on this. In addition, some students may benefit from guidance on how often they should be engaging with their supervisors, and encouragement to be proactive about arranging supervision meetings.

- In contrast to other Programmes, there are no student representatives on the Programme's steering committee - both the Director/Coordinators and the students were enthusiastic about introducing this.
- While thesis committees are in place, they did not always meet yearly, and do not include external members. In addition the need for the Programme Director to be on every thesis committee was noted. This places a high burden on the Director, is a risk to the Programme, and limits the Programme's size.
- Students did not seem to have the opportunity to teach, which some of them would clearly value. Perhaps such an opportunity could be incorporated into the graduate school course on bioethics mentioned above.
- Although students based outside the institute seemed to be well-networked via a "What's App" group, this did not extend across the Programme as a whole and the AB felt that a student retreat and other activities might be beneficial.

Cancer Biology PhD Program Strengths

- This is a well-established PhD Programme with considerable momentum, which some members of the AB were reviewing for a second time. Both the Director and Coordinator are highly engaged with the Graduate School and really value the opportunities it provides including DissGo.
- The Programme also benefits from its links with Cancer Network Zurich.
- The AB is extremely impressed by the engagement of the students, their involvement in the steering committee, the Scooped newsletter that they produce, and the retreat that they organise (including sponsorship).
- Both the Director and the PIs really value track 1 recruitment, particularly for junior PIs. They appreciate the number and quality of students that apply via track one, indeed the PIs suggested that maybe track 2 should not be used. However, we noted that the majority of the students we met had indeed come in via track 2.
- Students were very happy with the courses provided by both the Programme and the Graduate School, and with networking opportunities available to them.
- Both students and PIs valued the rearranged Programme courses, with short modules and more student choice.
- The Coordinator clearly has a high profile amongst the students, and is the go to person for any Qs or problems.

Opportunities / Areas for improvement

- Students on this Programme clearly have a heavy teaching load, which is particularly difficult to fulfil if their own supervisor is not involved in delivering courses, leading to them going into a 'teaching pool'. They were also disappointed that Masters student supervision was no longer credited and that minimal credit was given for looking after undergraduates.
- It also would have been interesting for the AB to meet more students carrying out their PhDs on sites other than Irchel and in more clinical settings.

Epidemiology and Biostatistics PhD Programme Strengths

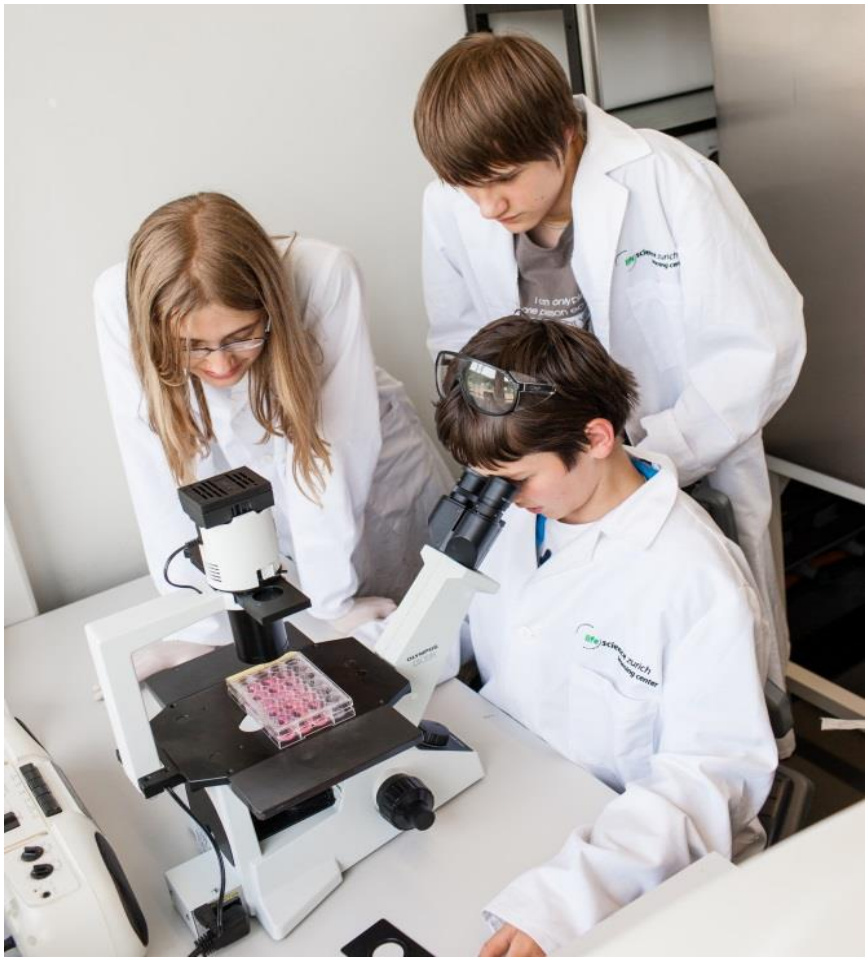
- Although only four years old, this was a very impressive Programme. The AB commends the Director and Coordinator on the care and attention that has gone into putting into practice the Programme's recruitment, structure, thesis committees, career development and training activities.
- The Director and Coordinator valued the engagement that they had with the Graduate School in developing the Programme and via the Coordinator meetings – we had the impression that this was a mutually beneficial 2-way interaction. The AB recommends this level of interaction as good practice.
- The career development activities to prepare students for an academic career looked outstanding and were appreciated by the students. We noted that students were also aware of where they could seek advice on non-academic careers.
- The students clearly had a strong sense of cohort, with a high awareness of what was expected of them and how to approach carrying out a PhD. They have also established a good social network.
- A novel highlight was the Research in Progress seminars, for which students working on unrelated topics help the student speakers to prepare their presentation and stimulate discussion after the presentation. There was clearly peer-to-peer learning on this Programme.

Opportunities / Areas for improvement

- Students would appreciate more faculty, including those outside of their immediate project area, attending their Research in Progress talks.
- Perhaps because of how much is provided via the Programme, students on this Programme seemed more reluctant to initiate their own academic/social activities, for example, by organising a student retreat or inviting a seminar speaker. The AB urged the students to take a bit more ownership of this. In addition, while there are 2 student reps who make a valued contribution onthe steering committee, there is a not student committee for them to interface with, which might encourage more student-led activities.
- Some of the methods seminars were felt to be too focused on specific topics, or to cover areas that some students were already familiar with. Perhaps the students could be engaged in suggesting appropriate topics for these courses.
- While students were participating in an appropriate amount of teaching, they felt that their access to training to do this could be improved – some had the impression this training was provided in German only, which we think is incorrect.

4. Life Science Zurich Learning Center

Prof. Daniel Kiper



4.1 Introduction

The Life Science Zurich Learning Center (LSLC) is well established as one of the leading organizations building bridges between the University of Zurich (UZH) and Swiss Federal Institute of Technology of Zurich (ETHZ), and the Swiss German school system. In 2017, the LSLC has maintained its offer and given numerous practical courses to school classes from the primary to gymnasial level, organized continuing education modules for practicing biology teachers, and developed projects to allow teachers and students to get insight into modern biological research. In addition, 2017 has shown continued collaborations between the LSLC and other organizations promoting sciences in society, such as the foundation Swiss Youth in Science (Schweizer Jugend Forscht), the Swiss Academy of Natural Sciences (SCNAT) and the Swissnet of Biolabs (a new organization regrouping school laboratories across the whole country).

4.2 Administration

4.2.1 Infrastructure

The LSLC comprises a laboratory used for practical courses and teaching modules for future biology teachers, and an office for the LSLC team. The LSLC has also storage space in the basement of the Institute of Evolutionary Biology and Environmental Studies.

4.2.2 Human resources

Daniel Kiper is the director of the LSLC (since 2012, 80% position). Claudia Bischoff (since 2010) continues to work for the LSLC with a 50% position and is responsible for the public school (primary and secondary levels) offers. Dr. Alex Butschi is in charge of the courses for gymnasial classes and the development of continuing education modules. Dr. Butschi started 2016 with a 50% position and has increased his pensum to 60% since August 2017. The LSLC also employs Pablo Sanchez for technical support, with a 20% position. The LSLC administration is performed by Helen Stauffer (circa 30%).

The practical courses were given, in addition to the members of the LSLC team, by the following team:

- Peter Arnold
- Atlant Bieri
- Ladan Egolf
- Mirjam Fehlmann (new)
- Alexandra Franz
- Michèle Grüner
- Meret Gut (new)
- Susanne Juhnke (new)
- Rahel Kästli (new)
- Anna Kutschireiter
- Angela Leu
- Sabrina Maxeiner
- Gabriela Purtschert
- Silvia Schelbert (new)
- Martina Schenkel
- Karin Schläpfer
- Jonas Schmid
- Silvan Spiri
- David Vukovic
- Michael Walser (new)
- Luca Vernazza (new)
- Valerian Zeender
- Katharina Zwicky

The new course instructors have been trained and supervised by LSLC members.

4.3 Activities

The regular LSLC activities can be sorted into the following categories:

1 - Training for future biology teachers
2 - Continuing education for biology teachers
3 - Courses for school classes (from primary school to end of gymnasium)
4 - Events for the general public
5 - Third party funded development of pedagogical material for school classes.

4.3.1 Training for future biology teachers

“Fachwissenschaftliche Vertiefung in Biologie mit pädagogischem Fokus” (1/2 Day during semesters): Profs. E. Hafen (ETH) and M. Zwicky (UZH) are responsible for Modul Bio901, part of the curriculum for biology teacher candidates (MASHE). The course comprises two weekly lectures followed by a colloquium and seminar (total 4 hours) given in the LSLC during official semesters. The module can also be taken as continuing education for biology teachers. The module requires participants to write a semester thesis and to perform one week of external work. The thesis requires participants to develop a teaching module on biologically relevant themes. A copy of all theses is kept in the LSLC office and can be borrowed upon request.

4.3.2 Continuing education

In collaboration with Dr. A. Wittwen (Institute of Education, UZH), the LSLC organized 4 different modules offered to biology teachers of the secondary II level:

- Fokus Herz (21 March 2017)
- Ein experimenteller Abstecher in die Neuroinformatik (17 April 2017)
- Human Enhancement - Zukunft oder Fiktion (4 November 2017)
- CRISPR-Cas9: Revolution der Gentechnik mit Tricks aus Bakterien (28 Novmeber 2017)

Those modules were attended by a total of circa 150 teachers. The continuing success of the course “Fokus Herz” leads us to offer it again in 2018. In this course, biology teachers learn about heart function directly from heart surgeons for the University Hospital Zurich (USZ), learn to dissect a pig’s heart, and can witness human heart surgery in the surgery room of the USZ. The CRISPR-Cas9 course was also very successful and will be offered again in 2018.
In addition, the LSLC organized independently a large continuing education module on animal experimentation, entitled “Tierversuche in der Schulklasse”, on Saturday, 16 December 2017. The course attracted more than 50 teachers on the Irchel Campus and was approved by the cantonal authority as an official day of continuing education for teachers conducting animal experiments.

4.3.3 Practical courses for school classes

Secondary Level II:

Molekularbiologie 1:	Gentransfer auf Bakterien - Bakterientransformation
Molekularbiologie 2:	"Wer war am Tatort?" - Genetischer Fingerabdruck
Molekularbiologie 3:	Völkerwanderung - Sequenzierung der eigenen DNA
Molekularbiologie 4:	Personalisierte Medizin am Beispiel von Alzheimer
Biochemie:	Biochemie zum Anfassen: Was geschieht mit einem Ei bei -200 Grad?
Neurobiologie:	Fokus Gehirn (available for all class levels)
Entwicklungsgenetik 1:	Der Fadenwurm C. elegans: Ein kleiner Wurm ganz gross
Mendelgenetik 1:	Klassische Zuchtexperimente mit der Taufliege *Drosophila melanogaster*

Secondary level I:

DNA-Isolation 1:	Im Zellkern liegt unsere Verwandtschaft zur Gurke
Grundlagen Genetik:	Genetik an der Taufliege Drosophila melanogaster
Biochemie:	Biochemie zum Anfassen: Was geschieht mit einem Ei bei -200 Grad?
Neurobiologie:	Fokus Gehirn (available for all class levels)

Primary school (Unter- and Mittelstufe):

DNA-Isolation 2:	Die Suche nach dem Geheimcode in den Lebewesen
Entwicklungsbiologie:	Aug in Aug mit der Taufliege Drosophila melanogaster
Ökologie:	Mit dem Salzkrebschen auf Tauchstation
Neurobiologie:	Fokus Gehirn (available for all class levels)

A new record total of **163 practical courses** were given in the LSLC in 2017, for a total of 3200 students (see Figs. 1 and 2 in the Annex).

4.3.4 Special courses and offers for school children and students

In addition to its regular courses, the LSLC also offered 7 Kinderuni sessions. Moreover, the LSLC has also offered laboratory tours for 10 schoolclasses in the Institute of Neuroinformatics (UZH and ETH) and provided the following services to biology teachers:

- Delivering of Drosophila lines for experiments
- Advice to teachers for their local school events (concepts and demonstrations)
- Advice to teachers and students for "Maturaarbeiten" in the field of biology
- Loan of equipment
- Loan and sale of literature (X- and Y-Chromosome books, 3-D Visual Illusion)
- Sale of a pig's heart model (produced by the Dept. of Anatomy of the UZH).

4.3.5 Offers for the general public

The LSLC actively contributed to the following public events in 2017:

- Nationaler Zukunftstag der MNF
- BrainFair
- Scientifica

4.4 Special projects

"Schweizer Jugend Forscht Studienwoche"
The LSLC has taken over the local organization of the Schweizer Jugend Forscht (Swiss Youth in Science) "Study week in Medicine and Biology" program. 8 students from the whole country worked in collaboration with doctoral students or postdocs of the University of Zurich and ETH Zurich during the week of 13-17 March, 2017.

„Supervising Students"
The LSLC contributed to the teaching of courses offered by the Life Science Zurich Graduate School. The LSLC taught two modules of the course "Supervising students", one in each of the academic semesters.

"MINT Projects of the Swiss Academy of Natural Sciences"
The LSLC's projects funded by MINT Switzerland (SCNAT) proceeded as expected and have been completed. The final reports were submitted in February 2017). The project titles were "Von Mendel und Moratorien: Lerneinheiten zur Förderung des naturwissenschaftlichen Verständnisses anhand gesellschaftspolitisch relevanter Beispiele aus der Biologie" and „Mit dem „ABC des Forschens": Forschkisten zum naturwissenschaftlichen Denken und Handeln an der Volksschule" – see also LSLC 2014 report**.**

The success of the „Forschkisten" has to be particularly noted. Four different experiment boxes (with themes neurobiology, evolution, ecology, and microbiology) have been tested by numerous primary school classes and are available to all primary schools since spring 2017. Complete information on this project can be found here:
http://www.lifescience-learningcenter.uzh.ch/de/forschzeit.html.
Claudia Bischoff, who manages this project, was asked to submit a continuing proposal that has now been accepted and funded by the SCNAT. The new project involves the creation of new experimenting boxes and the extension of the whole project to the secondary school level.

“Mini Moocs in Biology”
The LSLC had secured external funding from AMGEN for the project: “Mini Moocs in Biology” in which short video sequences are developed to complement the material made available in the “Forschkisten” (see the 2015 yearly report). To date, 17 short videos (minimoocs) are available for download on our webpages (http://www.lifescience-learningcenter.uzh.ch/de/forschzeit/materialien/laborfilme.html and http://www.lifescience-learningcenter.uzh.ch/de/forschzeit/materialien/Mini-Moocs.html). This project is ongoing and new videos are still being produced in collaboration with the company “Lucid”.

4.5 External collaborations

The LSLC has continued to work in collaboration with the following external organizations:

- Kinderuni UZH
- “Verein Forschung für Leben” (“Mobiles Genlabor”)
- Amgen Foundation
- Science Lab of the UZH
- Swiss Plant Science Center

4.6 Finances

Annual account 2017 LSZ Learning Center G-74010-02-01

	2016	2017
Earnings	**CHF**	**CHF**
Annual contribution UZH	81,308	60,300
Transfer ETH	180,000	200,000
Service earnings (costs for courses)	38,100	56,659
Other services earnings (costs for flies, heart model, etc.)	3,700	4,715
Reimbursement social insurance		1'895,
Total earnings	**303,108**	**323,569**

Costs	**CHF**	**CHF**
Consumables (research and lab material, cleaning agents)	8,733	6,327
Technical gases (C02)	806	1,242
Office supplies	202	191
Printed matter, teaching materials, photocopies	2,108	697
Graphic services	400	1,263
Computer (software & hardware)	6,574	3,631
Rent of photocopier		677
Services and taxes	856	
Transportation costs		195
Gifts and give-aways	83	208
Diagnostic service	205	90
Telephone and internet	84	75
Further education	80	100
Congresses and meetings		1,436
Travel costs	490	500
Fees for course instructors (external collaborators)	25,262	9,750
Salaries scientific staff	223,045	230,166
Salaries teaching staff	23,938	36,118
Salaries technical staff	12,919	18,074
DAG scientific staff	2,779	
Reimbursement scientific staff	-533	
Meal allowances	2,750	2,000
Social benefits (scientific and technical staff)	*4,904*	40,684
Total costs without social benefits	**310,780**	**312,739**

Annual result as of 31 December in CHF	**-7,671**	**10,830**

Financial Account Amgen / Minimoocs in Biology 2017 L-74010-02-01

	2016	2017
Earnings	**CHF**	**CHF**
Carry over	51,959	90,053
Fees for continuing education		1,500
Contribution Amgen	42,600	
Transfer "Spuren unserer Ahnen"	300	
Transfer Abschluss L-74010-07-01 («Von Mendel und Moratorien»)		483
Total earnings	**94,859**	**92,036**

Costs	**CHF**	**CHF**
Graphic and printing	4,806	21,023
Salaries		1,000
Social benefits		75
Total costs	**4,806**	**22,098**

Balance as of 31 December in CHF	**90,053**	**69,938**

After the closing of the project, the amount was transferred to account L-74010-01-01 (Learning Center, various projects)

Financial account 2017 ScNat „Forschkisten“ L-74010-06-01

	2016	2017
Earnings	**CHF**	**CHF**
Carry over	33,308	24,634
Contribution ScNat	19,850	10,500
Total earnings	**53,158**	**35,134**

Costs 2016	**CHF**	**CHF**
Technical and IT equipment	3,816	
Lab and research material	3,558	2,574
Office supplies	288	
Graphic and printing	3,522	837
Travel costs	103	
Graphic, film and photo		16’768
Honorarium text editing		1,780
Salaries scientific staff	15,775	11,865
Teaching material	195	
Social benefits	1,067	846
Gifts, varia	200	111
Total costs	**28,524**	**34,781**

Balance as of 31 December in CHF	**24,634**	**353**

Annual account 2017 ScNat „Von Mendel und Moratorien“ L-74010-07-01

	2016	2017
Earnings	**CHF**	**CHF**
Carry over	10,938	893
Contribution ScNat	14,700	7,800
Cover of negative balance (06.06.2017)		2,108
Total earnings	**25,638**	**10,801**

Costs		
Salaries	23,024	9,593
Social benefits	1,721	727
Total costs	**24,745**	**10,320**

Balance as of 31 December in CHF	**893**	**481**

After the closing of the project, the amount was transferred to account L-74010-02-01.

4.7 Annex

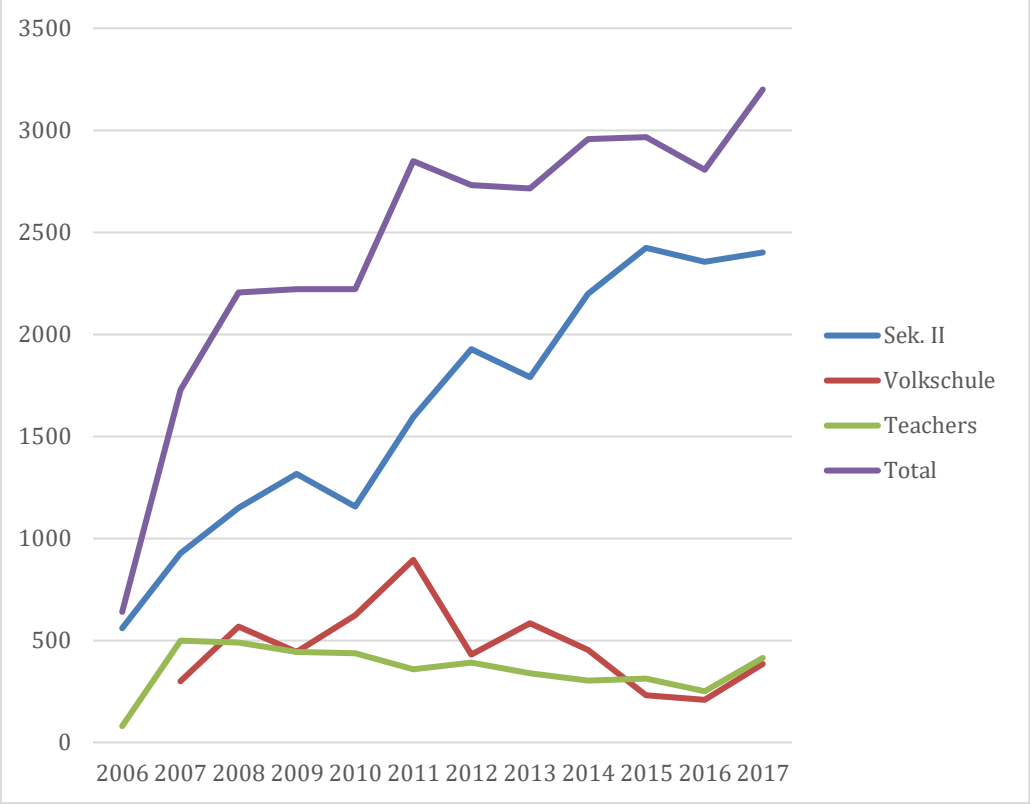


Figure 1: Number of participants in the practical courses, continuing education and training modules since 2006

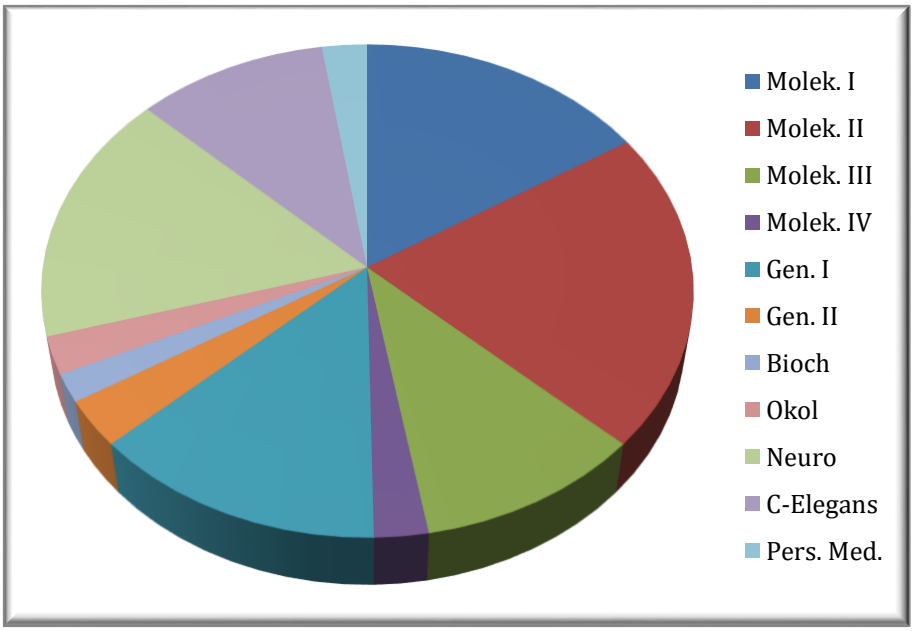


Figure 2: Relative distribution (in %) of LSLC practicals (all levels)

5. Life Science Zurich Young Scientist Network

David Vukovic

This report represents a condensed summary of the complete yearly report of the Life Science Zurich Young Scientist Network, which can be obtained upon request via (info@lszysn.ch). Generally, all events including respective photographs, feedback and programs are archived at www.lszysn.ch including programs, speakers, feedback and photo documentation.

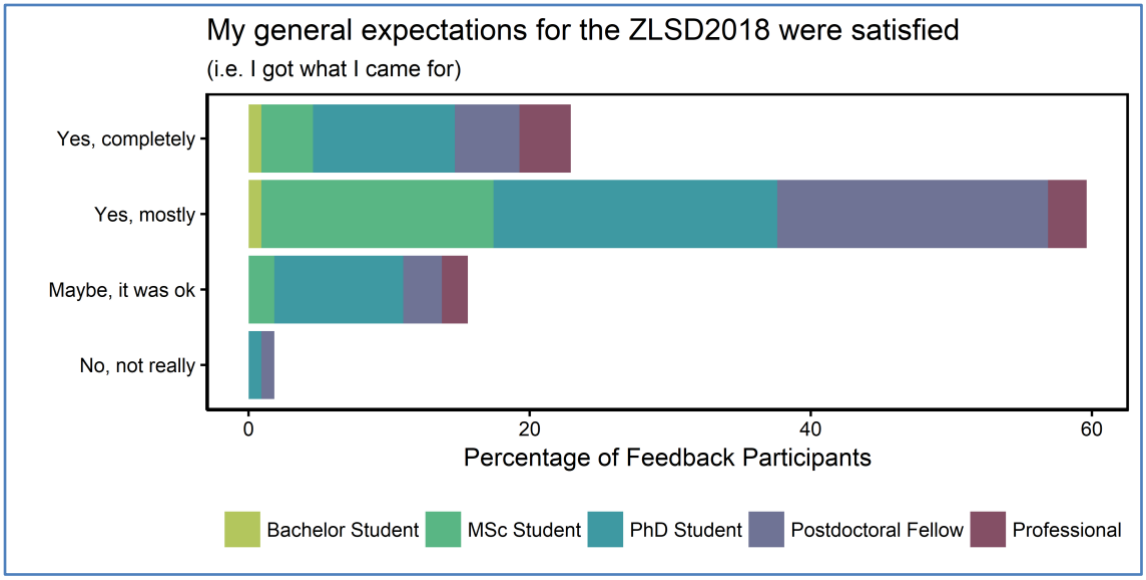
The Life Science Zurich Young Scientist Network (LSZYSN) is a non-profit organization created and run by a group of graduate students/post-docs of the University and the ETH Zurich. It was created by fusion of the Swiss branch of the Young European Biotech Network and the Life Science Zurich Biotech Network. It operates under the wing of Life Science Zurich, a joint initiative of UZH and ETH aiming to promote excellence in life sciences in Switzerland, and its main mission is to reduce the existing gap between academic research and the life science industry, in its broader sense. To achieve this the LSZYSN is engaged in a wide range of activities aiming to build sustainable relationships with companies operating in the life sciences/healthcare sphere and to promote networking. In addition to that the LSZYSN is committed to providing a collection of industry-related resources and to hosting events to allow its members to explore the world of biotechnology and to stimulate constructive interactions between people from various life science sectors. We envision that our efforts will contribute to the formation of a well-informed, competitively skilled and well-connected local and global life science community.

In the following section this year's activities will be summarized (time period reported is 1 April 2017 to 31 March 2018), sectioned into our functional groups.

5.1 Zurich Life Science Day 2018

The Zurich Life Science Day 2018 took place 1 February 2018 and featured a keynote lecture by nobel laureate Martin Chalfie, one of the three well-known discoverers of GFP – green fluorescent protein. His talk was followed by six sessions of two parallel talks from large and small companies from the biotech industry in a broader sense. The program was designed to give a balanced overview of the possible career paths for graduates of the life sciences including both well-known pharmaceutical companies (Roche, Novartis) as well as niche players (DHC AG, life science IT consulting). Between and during talks, participants were able to network and interact with company representatives at the rich company exhibition, consisting of 30 companies as well as two booths from student organizations (our own as well as the Biotech Network Lausanne, BSNL). The total amount of financially supporting partners was 35. In total, the event counted 705 participants, approximately 100 company representatives and 20 members of LSZYSN. Additional services offered to our participants included a job-wall, scheduled informal meetings with company representatives, the possibility to obtain professional portraits taken (through a collaboration with Steven Kohl photography), CV-checks as well as a prize-draw and apéro to conclude the event.

The event was received well amongst participants of all levels with minor complaints in the context of information content on the homepage and insufficient slots for CV-checks and informal company meetings. The latter is limited by the number of company representatives a company decides to bring to the ZLSD. As shown below, over 80% of the 109 participants who filled out the feedback questionnaire gave positive feedback. The latter group consists of two satisfaction levels ("Yes, completely" and "Yes, mostly") where a highly similar distribution of career level was observed. In the neutral/negative fraction ("Maybe, it was ok" and "No, not really") a clear majority of PhD students is found hinting towards the fact that either PhD students have higher expectations or parts of the event were less satisfactory for this participant group.


My general expectations for the ZLSD2018 were satisfied
(i.e. I got what I came for)
Yes, completely
Yes, mostly
Maybe, it was ok
No, not really
0
20
40
60
Percentage of Feedback Participants
Bachelor Student
MSc Student
PhD Student
Postdoctoral Fellow
Professional


PROGRAM
LAUNCH YOUR CAREER
ZURICH LIFE SCIENCE DAY 2018
1st February, University of Zurich, Irchel Campus
Session A (G30)
Session B (G45)
08:30 - 09:00
Registration
09:00 - 10:00
Welcome and Introduction by the Chairman of LSZYSN
&
Keynote Lecture
Prof. Dr. Martin Chalfie, Nobel Laureate in Chemistry 2008
for the development of the green fluorescent protein, GFP
CV Checks
CV Photo Shoots
Informal Meetings
10:00 - 10:45
Coffee Break & Company Exhibition
10:45 - 11:25
Careers in Clinical Trials
Covance
Yvonne Boschung, Clinical Operations Manager
Jacqui Ariaans, Clinical Operations Sr. Manager
Andreas Müller, Clinical Research Associate
Careers in Cognitive Healthcare at IBM
IBM Global Business Services
Frederik Flöther, Senior Data Scientist
11:30- 12:10
From Scientific to Commercial Careers
AurigaVision
Susanne Rietiker, CEO
Careers in Management Consulting
McKinsey
Valentina Sartori, Partner
12:10 - 13:40
Cold Lunch & Company Exhibition
13:40 - 14:20
Alternative Careers in Science
Swiss Tropical & Public Health Institute
Christian Burri, Division Head
Careers in Medical Writing
European Medical Writers Association (EMWA)
Raquel Billiones, Senior Director
14:25 - 15:05
Science Careers at Roche
Hoffmann-La Roche
Ignacio Fernandez Garcia, Talent Scout
Jitao David Zhang, Computational Biologist
Clinical Development at Novartis
Novartis
Ivana Galetic, Global Program Team Director
15:05 - 15:50
Coffee Break & Company Exhibition
15:50 - 16:30
Careers in Medical Affairs
Abbvie
Martin Schulz, Medical Advisor Rheumatology
Careers at CSL Behring
CSL Behring
Franziska Balmer, Scientist in Quality Management
Jenny Kjaer, Director, HR Business Partner
16:35 - 17:15
DOs and DON'Ts for Interviews
ETH Career Center
Evelyne Kappel
Careers in Life Science IT Consulting
DHC AG
Björn Handke, Senior Consultant
17:15 - 17:30
Prize Draw in Lichthof
from 17:30
Networking Apéro
Exhibition and sponsoring by

5.2 Career chats

The career chats team is comprised of 10 people and the main aim of the team is to invite company representatives for a 30-40 minute talk usually at ETH Hönggerberg or University of Zurich Irchel campus. The idea is that the presenters discuss their career paths, how they managed to climb up the professional ladder successfully, the challenges and pitfalls they faced and how it is to work in the company they are currently employed with. Potential job opportunities are also usually discussed in this seminar series. The team meets up at the beginning of the first semester to discuss about the speakers to be contacted during the year. The objective is to have a minimum of 3-4 talks per year.

This season, four career chats were organized with the following companies:

1	3 March 2017	Thermo Fisher Scientific
2	22 June 2017	GE Healthcare Life Sciences
3	7 September 2017	Novartis Institutes for BioMedical Research (NIBR)
4	8 March 2018	A.T. Kearney

Overall, our seminar series has been greatly appreciated and we are very thankful to all the speakers and the respective companies for their incredible support. We appreciate their investment of time, and belief in the goals of the Network in bridging academia and industry.

5.3 Company visits

The main goal of our Company Visits is to offer graduate students, non-graduate students and postdocs opportunities to visit factory sites. Our visits usually consist of talks given by employees, which shed light into the nature of their position in the company and the working environment. Furthermore, participants are able to learn more from both junior and senior ranking employees about career opportunities at these companies during the concluding informal apéro.

In March 2017, 20 interested students visited Merck, formerly Sigma-Aldrich, in Buchs. First, the Site Director gave a very warm welcome and introductory talk about the company's history, core business and development. The participants were then split up into groups to visit the R&D, Quality Control and Production/Process Development departments of the facility. The whole event was concluded with a generous apéro, during which the participants had the chance to gain more insights about career options and to network with the presenting employees. This visit was very well received by the participants, as it was the first Company Visit that focused mainly on Chemistry.

Our second company visit was in July at Boehringer Ingelheim in Biberach (Germany). This event took place over the entire day, as it was our very first international Company Visit. 29 participants attended both a lecture entitled "From Mind to Market" as well as visits to various laboratories of Process Development, including Cell Culture, Purification & Formulation and Leadership in Biopharmaceutical Production. In the end, Boehringer Ingelheim also provided a networking apéro where a few representatives were present for questions.
In October, 20 participants visited AstraZeneca in Zug. The Country President of Switzerland gave us a very warm welcome and motivational speech. This was then followed by three very detailed talks from employees. The topics that were covered ranged from Market Access to Regulatory Affairs. All employees were very helpful and stayed during the networking apéro, which was also kindly provided by the company.

Our last Company Visit of 2017 took place in November at the BioTechnopark in Schlieren. In contrast to most of the previous visits, the participants had the opportunity to gain insight into BioTechnopark itself, as well as into multiple start-up companies such as InSphero and Kuros Biosciences. The participants also attended a lab tour of Molecular Partners and the event was concluded with an open-end apéro.

Usually, our company visits were booked out within 1-2 hours after the registration opened. This clearly reflects the high demand for such events and confirms the value and success of our events. Additionally, several companies are interested in organizing visits with us on a regular basis, showing that the benefits are two-sided.

5.4. Zurich Life Science Week

The Life Science Week aims to present Master, PhD and Postdoc graduates several ways to find job opportunities outside of academia, and to give them some tools to achieve a successful job hunt. Within five evening sessions our coaches teach the participants the basics of carrier management, the DOs and DON'Ts of job interviews as well as the chances of hidden labor market, together with insights into the right use of LinkedIn. More than the theory, the ZLSW offers interactive workshops, with hands-on practical activities. The week closes with a networking apéro with the coaches, which paves the way for further inspiring discussions. We are very happy about the number of applicants and the feedback request to set it up twice a year. However, out of capacity reasons from the coaches' side, this can't be put into practice at the moment. The last ZLSW took place between 12 and 16 June 2017 at Irchel Campus with 20 selected participants (out of 56 applicants). 60% of our participants were currently working on their PhD thesis, followed by approximately 30% postdoctoral fellows and 10% master students.

5.5 MindSet

Mindset is an event series which aims to expand the scope of LSZYSN events into the field of discussions that deal with important current social and scientific issues. The goal is to inspire, inform and motivate young scientists.
The topic for the third edition of MindSet was: "The Cost of a Cure – Drug Prices Explored". It took place on 16 October 2017 at the Audimax of the ETH City campus. The following panelists contributed to a lively discussion between panelists, an engaged audience and our two moderators, Andreia Fernandes and Filipa Ferreira. The debate was followed by an apéro provided through a collaboration with Ässbar. Both the audience and the panelists received the event very well.

- **Heiner Sandmeier**
  Deputy General Secretary Interpharma, Member of Federal Medicines Commission (EAK)

- **Nikola Biller-Andorno**
  Professor & Director of the Institute of Biomedical Ethics and History of Medicine, University of Zurich
- **Spring Gombe-Götz**
  Policy Advocacy Manager at Drugs for Neglected Diseases Initiative
- **Martine Ruggli**
  President Federal Medicines Commission (EAK), Board Member PharmaSuisse

5.6 IT Team

During the 2017/18 session, the IT team facilitated the on-boarding of new members into the Network. On average, we expect the Network to experience a nearly 100% turn-over of members every 3-4 years. A check-list for on-boarding of new members has been put in place to make the process more efficient and transparent, ensuring that all new members quickly get access to the communication channels of the Network.

This year, the tasks of social media, newsletter, and other forms of outreach were moved into a separate subgroup to better coordinate those actions with the events of other subgroups.

The largest task of the IT Team was the continued development of the booking system for the Zurich Life Science Day. In collaboration with Clearbookings Ltd, we enhanced the system used for the ZLSD17, with improved features for duplication detection and payment processing. This dramatically improved the service we could offer attendees to the event, such as faster processing of cancellations and changing of peripheral event bookings. This year we pushed attendees to pay online before the event, resulting in zero collections to be done afterwards - far more efficient than previous years and with minimal inconvience to attendees. In the future, we can consider offering more payment options beyond credit card, such as Twint and direct bank transfers for the convenience of attendees.

5.7 Internal Functioning

The idea of the internal functioning team was born on a group retreat in 2013. As the network is growing, internal processes and knowledge have to be maintained and transferred. Furthermore, workshops from trainers that provide valuable skills to our members can be used to improve the network itself (presentations, organization). These skills are often transferrable and are also of benefit to the members. The Internal Functioning team organizes the group retreats. Having a dedicated team for these functions smooths and improves the functioning and professionalism of the LSZYSN as a whole.

This year's activities included a presentation workshop, a partnering workshop, where skills necessary for sponsor acquisition are taught, as well as a second presentation workshop professionally organized by A.T. Kearney. The latter was offered for free in order to be "tested" by our members before offering it to a wider audience of the Zurich life science community. Moreover, as every year, the internal functioning team organized our yearly retreat, where new members are introduced, project groups formed, and the cornerstone of the upcoming season's ZLSD is created.

5.8 Financial Matters

After changing the end of our fiscal year from December to April in 2016, we were able to make our financial reporting system more efficient and accurate through ending the year in a moment where only a minimal amount of transactions is conducted. Each season starts now after the ZLSD and

therefore consists of a year of project expenses as well as a complete edition of the ZLSD. This allows for more detailed budgeting as well as a more meaningful measure of financial performance. Previously, earnings and expenses from the ZLSD were not concluded in December, thereby randomly distributing transactions between the two fiscal years.

This year, we were able to reduce our running project costs by eliminating a highly expensive event series, which was targeted only to a very small number of participants: “Bench-to-business”. Apart from that we are now profiting from last year’s larger investments, like the professionally-directed image video which burdened last year’s budget, but could be put to great use during this year’s advertisement campaigns. Within the Zurich Life Science Day project, we were able to reach our partnering goals even with unsuccessful grant applications from organizations outside the free market economy. Additionally, we were able to attract more participants from higher career levels this year as well as reduced the running costs of our registration system through re-negotiating our terms with Clearbookings Ltd. Costs increased this year drastically for our keynote speaker, as an expensive change of flights had to be arranged. However, given Martin Chalfie’s high profile, we expected his presence to balance these costs by positively influencing the number of industry partners as well as participants.

Earnings 2017-2018	
Partnering ZLSD 2018	59,250
Participants' fees ZLSD 2018	26,805.24
Company visits	1,250
Total	**87,305.24**
Expenses ZLSD 2018	
Marketing	1,971.55
CV photos	5,000
Catering	36,468
Keynote lecture	6,008
Registration system	1,750
Participants' material	2,482.20
Other	622.95
Total	**54,302.70**
Expenses for subevents	
Career Chats	959.35
Zurich Life Science Week 2017	2,090.20
Mindset	2,288.15
Team expenses (meetings, retreat)	4,944.89
Thank you event	2,229.60
Company visits	0
External collaborations	313.85
Informatic tools	538.07
Total	**13,363.91**
Carry over 2017	78,939
Balance as of 31 March 2018	98,578

6. Life Science Zurich Business Network

Danielle Spichiger

Das von der UZH und ETH unabhängige Business Network ist als Verein organisiert. Es fördert die Vernetzung und Zusammenarbeit der verschiedenen biowissenschaftlichen (Life Science) Institutionen im Grossraum Zürich mit Hochschulen, Spitälern, Firmen, Behörden und anderen Organisationen und Personen in der Schweiz und im Ausland.

6.1 Aktivitäten

6.1.1 BIO 2017

Die BIO 2017 fand vom 19. – 22. Juni 2017 in San Diego statt. Das Life Science Zurich Business Network war wie üblich als «be part of it Logo» im «SWISS Pavilion» an diesem grössten globalen Event der Biotech-Industrie präsent.

6.1.2 Networking-Veranstaltungen

Am **30. Januar** hatten wir die Gelegenheit, Vertreter sowie Aktivitäten des Impact Hub in Zürich kennenzulernen. Im Anschluss besichtigten wir die beiden Impact Hub Standorte Colab und Viadukt.

Vor der jährlichen Geschäftsversammlungssitzung vom **29. Mai** bei Hombrechtikon Systems Engineering AG in Hombrechtikon trafen die Mitglieder des Business Networks Dr. Michel Collasius, CEO von HSE AG, Konstantin Lutze, CTO von HSE AG und Mitarbeitende. Nach einer kurzen Einführung folgte ein interessanter Firmenrundgang mit Demonstrationen.

Am **29. Juni** fand der Anlass Smart Health statt, welcher inartis in Zusammenarbeit mit der Standortförderung des Kantons Zürich sowie weiteren Partnern organisierte. Die Mitglieder des Business Networks wurden eingeladen. Das LSZBN war mit Logo und Booklet präsent. Verschiedene Zürcher Life Science- und Healthtech-Akteure erhielten eine Plattform.

Das geplante Networking-Event im 4. Quartal musste abgesagt werden – es galt die Energien für die bevorstehende Konferenz im Januar 2018 zu bündeln.

6.2 Vereinsorganisation

Mitglieder:

- Balgrist Campus AG, vertreten durch Thomas Huggler
- BIO-TECHNOPARK Schlieren-Zürich, vertreten durch Ernst Hafen und Mario Jenni
- Grow Wädenswil, vertreten durch Dolf van Loon
- Standortförderung des Kantons Zürich, vertreten durch Danielle Spichiger
- Standortförderung der Region Winterthur, vertreten durch Michael Domeisen/Stephanie Hälg
- Start Smart Schlieren, vertreten durch Barbara Angelsberger
- Toolpoint for Life Sciences, vertreten durch Hans Noser
- Wirtschaftsförderung der Stadt Zürich, vertreten durch Benno Seiler

Ausser Michael Domeisen, Stephanie Hälg, Mario Jenni und Thomas Huggler bilden die oben genannten Personen den Vorstand.

Balgrist Campus AG konnte im 2017 als neues Mitglied gewonnen werden.

Isabel Klusman hat Life Science Zurich verlassen. Das **Präsidentenamt** wird neu von Danielle Spichiger (ehemals Vize-Präsidentin) wahrgenommen gemäss Beschluss an der GV 2017. Silvie Cuperus, die neue Leiterin von Life Science Zurich, wurde auf dem Zirkularweg am 28.11.2017 als neue Vizepräsidentin gewählt. Zusammen mit Mario Jenni vom BIO-TECHNOPARK waren die Präsidentinnen ausserdem für die Geschäftsführung zuständig. Hans Noser war 2017 wiederum Vereinskassier.

Weitere Kooperationspartner sind im **Beirat** eingebunden. Für 2017 waren dies folgende Personen:

- Onur Boyman, Universität und UniversitätsSpital Zürich
- Michael Hengartner, Universität Zürich
- Lukas Huber, Greater Zurich Area AG
- Hans-Anton Keserue, Alumnus LSZ Young Scientist Network
- Isabel Klusman, Museumsleitung Zoologisches Museum
- Marjan Kraak, ETH transfer
- Cathy Kroll, Swiss Biotech Association
- Gabriela Senti, Clinical Trials Center, UniversitätsSpital Zürich
- Adrian Sigrist, Unitectra

6.3 Webseite

Isabel Klusman und Danielle Spichiger waren verantwortlich für die neue Webpage des Business Networks (http://lifescience-businessnetwork.ch/), welche seit dem 4. Quartal online ist.

6.4 Organisation des ersten LSZ-Impact-Anlasses

Die Organisation des ersten LSZ Impact Anlasses – die Konferenz «Translational Medicine» – war sehr arbeitsintensiv und wurde durch das Dreier-Team Isabel Klusman (ab November Silvie Cuperus), Danielle Spichiger und Mario Jenni bewältigt; mit Unterstützung von Ernst Hafen und Christoph Hock. Ein interessantes Programm mit 40 Speakern (Parallel Sessions), darunter Persönlichkeiten wie Andreas Plückthun, wurde erstellt. Auch das Panel wurde prominent besetzt, u.a. mit Nathan Hubbard, dem Verantwortlichen für Digital and PHC Partnering bei Roche, Effy Vayena, Professorin für Bioethics und Health Policy an der ETH Zurich, sowie Costas Bekas von IBM Research-Zurich aus dem Bereich Cognitive Computing.

Über Sponsoring sowie Partnerbeiträge konnten CHF 80’000 gesammelt werden, ein komfortables Budget für unser Vorhaben trotz Ablehnung unseres Antrags an die KTI (heute Innosuisse). Ziel der Veranstaltung ist es, Forscher aus Akademie mit Industriepartnern und Investoren zusammen zu bringen. Hierfür waren 1:1 Partnering-Meetings geplant.

Ein ausführlicher Bericht über den Anlass folgt im Jahresbericht 2018.

6.5 Finanzen

Jahresrechnung Life Science Zurich Business Network

		2016	2017
Erträge		**Total CHF**	**Total CHF**
Mitgliederbeiträge	CHF 500 / Jahr	3’000	4'500
Total Einnahmen		**3’000**	**4’500**
Aufwand			
Kapitalkosten		58	0
Lektorat LSZ-Booklet	Simon Milligan	820	
Marketing & Werbung	neue Webseite		2’377
Administration & Beratungskosten		702	774
Meetings, Events & Präsentationen	BIO 2016/17	1’400	2’160
	Networking Events (Catering)		784
Total Aufwand		**2’980**	**6’095**
Jahresgewinn / -verlust		**20**	**-1’595**
Übertrag aus Vorjahr		**11’417**	**11’437**
Vereinsvermögen per Ende Jahr		**11’437**	**9’842**

Die Abrechnung der Konferenz «LSZ Impact – Translational Medicine in Zurich» folgt im Jahresbericht 2018 (Ertrag von ca. +CHF 14 000).

Mitgliederbeiträge: eine Zahlung für das Jahr 2016 erfolgte erst im 2017 und im 2017 konnte ein neues Mitglied gewonnen werden. Deshalb sind die Mitgliederbeiträge im 2017 um 1'500 höher als im 2016. Der höhere Aufwand im 2017 ist insbesondere auf die Kosten für die neue Webseite zurückzuführen. Im 2017 resultiert ein Jahresverlust von etwas über CHF 1'500; das Vereinsvermögen beträgt knapp CHF 10'000.