

#### Imprint

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#### **Editorial**

Dear Reader, Dear friends and colleagues

It is our greate pleasure to introduce to you the Bienal Report of Department of Dermatology at the University Hospital in Zurich for the years 2019/2020.

Prof. Thomas Kündig was selected to be the new chairman of the department which was a smooth transition into a new area with many challenges based on the reconstruction of the University Hospitals.

The new facilities in Schlieren at the airport in the Circle complex and on the Campus of the University Hospitals in the NORD building will be the next challenges for our department.

Nevertheless the team of the Dermatology department proudly presents successful achievements.

Prof. Dr. Dr. Marie-Charlotte Brüggen, was newly appointed at the Swiss Institute of Allergy and Asthma Research (SIAF), University of Zurich, Davos, together with Dr. Claudia Lang, received support from the innvovation pool of the University Hospital Zurich for new invitro diagnostic tools.

PD Dr. Marjam Barysch-Bonderer is now a certified Mohs Surgeon (appointed by the European Society of Micrographic Surgery

Dr. Michael Kunz completed a fellowship in Mohs micrographic Surgery in the USA and is now certified Mohs Surgeon and Member of the American College of Mohs Surgery.

Dr. Joanna Mangana was elected to preside the Swiss Melanoma Working Group of the SAKK.

PD Dr. Julia-Tatjana Maul received several scholarships and was nominated as a Global Medical Coordinator of the Global Psoriasis Atlas.

Prof. Peter Schmid was nominated as Honorary President of the Swiss Society Alllergology and Immunology and nominated as Honorary Member of the Tanzanian Society for Dermatology.

Finally, Dr. Egle Ramelyte received the Skin Cancer Award for her PhD thesis on "Oncolytic virotherapy mediated anti-tumor response through a single cell's perspective".

In the field of telemedicine it is important to know the App "derm2go" was founded by the UZH Health Innovation Hub.

These achievements together with the high quality scientific output resulted in an international visibility of our Department. Prof. Reinhard Dummer is ranking high in the top authors list in Dermatology as it was published in the Journal of the American Academy of Dermatology.

This incomplete summary of achievements reflects the productivity of our Department, which is combined by high quality patient management and ambitious educational activities.

All these achievements became reality due to highly motivated team of employees of the University and the University Hospitals. We hope for a many additional productive years despite the organizational and spatial changes during the upcoming years.

#### Enjoy!



Prof. Dr. med. Thomas Kündig
Director
Department of Dermatology
University Hospital Zurich



Prof. Dr. med. Reinhard Dummer Vice-Chairman Department of Dermatology University Hospital Zurich

## **Assignment**



Circle, Airport Zurich, architecural model 2019

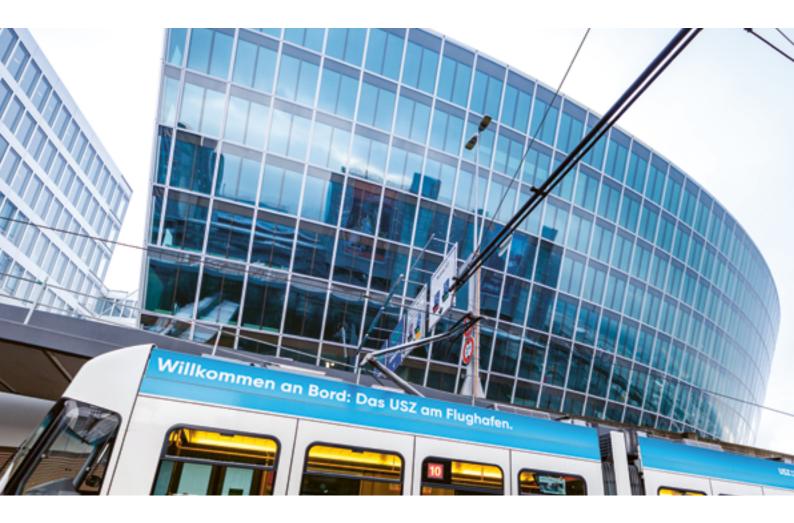
The Department of Dermatology at University Hospital Zurich (UHZ) is dedicated to providing sustained leadership in research, patient care and education in the fields of dermatology, venereology and allergology.

Our nationally and internationally acclaimed department features centers of excellence for skin cancer, inflammatory and allergic skin diseases, and dermatological surgery. Our team of 47 specialist physicians offers high-level patient care in all areas of dermatology, venereology and allergology through our large-scale outpatient care clinic (Dermatologische Poliklinik), our inpatient dermatology service, daycare unit and a network of tertiary care referral clinics covering a wide range of specialty areas, including melanoma and difficult pigmented lesions, non-melanoma skin cancers, cutaneous lymphoma, bullous and autoimmune skin disease, medical dermatology, psoriasis, hair and scalp disease, occupational and contact dermatitis, dermatologic surgery, dermatopathology and physical therapies (phototherapy, radiotherapy and laser therapy).

Our research activities focus on basic and translational research relating to skin disease, primarily skin cancer and inflammatory skin diseases. The efforts of our research groups are reflected in regular publication in high-level journals and a high cumulative annual impact factor.

Collaboration and networking with talented scientists and research groups at the University of Zurich, ETH, collaborative networks such as the Cancer Network Zurich, and other leading European dermatology centers help to significantly strengthen our research activities. Education is the third main field of activity of our department. Over the past few years, the department has focused its resources on pre-graduate and postgraduate training and the development and maintenance of DOIT (Dermatology Online with Interactive Technology), our innovative Internet-based pre-graduate learning tool, in collaboration with the European Dermatology Forum.

# Mission statement



Working in close collaboration with other departments and institutes at UHZ, the top priorities of the Department of Dermatology are to:

- offer high-quality individual diagnosis and therapy for various skin diseases,
   and educate patients in skincare and the prevention of skin disease
- provide a high level of teaching and training in dermatology at pre- and post-graduate level
- perform innovative basic and clinical research with the ultimate aim of helping to improve patient care
- foster constructive collaboration and networks with private practitioners and primary and secondary institutional care providers

In fulfilling this mission, we aim to strengthen our position as one of the leading dermatology departments in Europe.

## 3

## Team & Management

#### **Physicians**



Nursing team outpatient-setting



**Administrative team** 



Secretaries/assistants



**Nursing Team Outpatient Clinic** 



#### **Management**

Inpatient Clinic/



Outpatient Clinic, Skin Cancer Prevention Prof. Dr. med. Ralph Braun



Vice-Chairman,







Head Nurse





#### Attending physicians with extended responsibility





pathology

Dermato-





Dermatosurgery \*PD Dr. med





#### **Attending physicians**



































Clinical trial Unit/ Dermatooncology Dr. med. Egle Ramelyte

Outpatient Clinic



Dermato-oncology

#### Attending physicians i.V.

# Patient care and laboratories

In the Swiss healthcare system, the five university hospitals are responsible for providing virtually all of the country's inpatient dermatology services. By contrast, outpatient care is available in both the private sector and public institutions (university and cantonal hospitals). The UHZ Department of Dermatology is the largest academic dermatology center in Switzerland and provides state-of-the-art inpatient medical care for complex and rare skin problems. The department's skilled surgeons perform complex surgical and histologically controlled procedures, and the team is able to administer complex chemotherapeutic regimens and intravenous immunotherapy, including antibodies and fusion molecules. We also provide an extensive range of outpatient services, including highly specialized consultations. Our department benefits from an extensive referral base for these specialist activities and its own on-site histopathology laboratory.

#### Outpatient unit ("Poliklinik") and specialist care clinics

Prof. R. Braun, and his team of dermatologists and specialist nurses treat over 22,000 patients on referral as part of more than 70,000 consultations a year. In contrast to general outpatient clinics, patients benefit from the expertise of international specialists in the fields of dermatology and venereology, and more specifically in autoimmune disorders, psoriasis, atopic dermatitis, hidradenitis, acne and other severe dermatologic diseases, disorders of the hair and sculp, hyperhidrosis, pediatric dermatology, urticaria and more. The site is home to a weekly interdisciplinary wound clinic, which is organized in collaboration with the departments of vascular surgery, angiology, orthopedics and plastic surgery, and is intended for patients with chronic difficult-to-heal wounds.In our daycare unit, infusion therapies are administered in an outpatient setting. Most of our patients suffer from metastatic melanoma and are treated primarily using recently developed immunotherapies. These are highly effective treatment modalities. Further diseases treated at the daycare unit include inflammatory and autoimmune diseases, and cutaneous lymphoma. By relocating to a single room (C19), we have improved our monitoring capabilities, as it means one nurse and one physician can now be on site. The new, rapid point-of-care laboratory analysis system for blood samples reduces the duration of treatment. Due to the rapidly increasing number of immunotherapies that are available, our capacity utilization has increased from 41% to 123%. We offset the resulting shortage of space and personnel by optimizing various processes, and are continuing to work on other improvements with the aim of making each patient's stay at our daycare unit as comfortable as possible.

## Skin cancer center – part of the Comprehensive Cancer Center Zurich

Our department's DKG-certified (DKG: German Cancer Society) skin cancer center is headed by Prof. R. Dummer and Dr. J. Mangana, who direct a team of expert skin





"Skin health is our focus."

Prof. Ralph Braun Head Outpatient Clinic and Skin Cancer Prevention University Hospital Zurich cancer specialists (PD Dr. T. Maul, Dr. A. Binkert, Dr. C. Lang, Dr. M. Nägeli and Dr. R. Ramelyte). The center comprises the following clinics:

- The pigmented lesion & skin cancer prevention clinic, which is headed by Prof. R. Braun and makes use of modern high-tech equipment (confocal microscopy, skin surface video-microscopy, dermatoscopy, fullbody imaging) for the early detection of melanoma.
- The skin cancer clinic headed by Prof. R. Dummer and Dr. J. Mangana offers highly professional treatment and follow-up services for patients with different types of skin cancer. Outpatient infusion therapies are managed by Dr. J. Mangana. Dr. M. Nägeli is in charge of a specialized non-melanoma skin cancer clinic. Access to the most innovative clinical trials is provided in the clinical trial unit headed by Dr. E. Ramelyte and PD Dr. T. Maul.



With the incidence of melanoma and other skin cancers growing worldwide and new therapies prolonging the survival of patients at advanced stages of the respective disease, complex medical care has become critical. The most effective care for complicated melanoma and skin cancer is provided in specialized referral centers such as the Skin Cancer Center, which is part of UHZ's Cancer Center Zurich (www.cancercenter.ch). Our aims are to provide optimized melanoma therapy, record the best patient-reported treatment outcomes and carry out successful clinical and translational research, all of which require a dedicated interdisciplinary team.

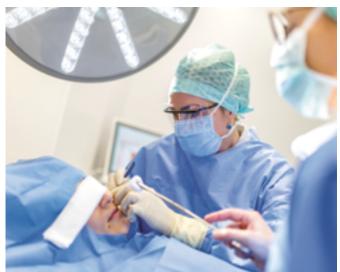
In today's rapidly evolving scientific environment, modern skin cancer management is a typical example of precision medicine. Networking and collaborative projects involving basic research at local, national and international level are crucial here. The inclusion of wellestablished local basic research groups and cooperative projects – including the investigation of patient samples collected in the biobank – is especially sought after. Clinical research with clinical trials sponsored by pharma-

ceutical companies and initiated by investigators is essential for creating a critical understanding of clinical science.

Patients are regularly informed about these projects and actively support these efforts from time to time.

#### Dermatologic surgery and Mohs micrographic surgery

Our dermatosurgery unit focuses on the surgical treatment of skin cancer through the application of Mohs micrographic surgery and "slow Mohs" following the "Tübingen cake" technique. The staff team consists of PD Dr. M. Barysch-Bonderer, Dr. S. Bruckert, Dr. C. Greis, Prof. Dr. J. Hafner, PD Dr. S. Läuchli, Dr. D. Muggli, Dr. C. Murer, Dr. S. Nobbe, Dr. M. Wolfensperger, and the team of specialized nurses (Luigi de Matteis, Dina Zlatic and team). Together, they treat over 4,000 skin lesions (primarily malignant) each year. The vast majority can be operated on under tumescent local anesthesia. Frail and elderly persons are able to stay as inpatients for brief periods of hospitalization, making this center particularly suitable for geriatric dermatologic surgery.



Specialized wound care is administered to a smaller number of patients, with a variety of debridement techniques and grafts being employed. Keloid patients receive medical infiltration and dermatologic laser therapy. Electrochemotherapy, CO2 laser surgery and other specialized techniques can also be provided.

#### Clinic for immunocompromised patients

The clinic for immunocompromised patients, headed by Dr. M. Nägeli, is intended primarily for patients taking immunosuppressive medication following an organ or stem cell transplant, as well as patients taking continuous immunosuppressive medication to combat inflammatory



"It is wonderful how the overall survival of our melanoma patients is continously increasing."

Prof. R. Dummer Head of Skin Cancer Unit & Vice-Chariman University Hospital Zurich

diseases. The ultimate aim is to prevent skin cancer, as the risk of these patients developing non-melanoma skin cancer (NMSC) is at least 65 times higher than that of immunocompetent individuals. In addition, we provide information on prevention by means of protective measures (clothing, sunscreen, etc.). The clinic benefits from extremely close cooperation with the UHZ Transplantation Center, whose coordinators regularly refer patients to the clinic. With patients who have undergone an organ transplant now living longer, the number of patients is on the increase. In 2019, more than 2'115 patients were seen as part of more than 3'370 consultations during the clinic's specialized consultation hour (increase in terms of patient compared with the previous year: 100%).

We are also affiliated with international organizations such as SCOPE (Skin Care in Organ Transplant Patients Europe; scopenetwork.org) and ITSCC (International Transplant Skin Cancer Collaborative).

## Physical treatment unit – including radiotherapy, phototherapy and laser therapy

Headed by Dr. L. Imhof, this unit is equipped with the latest physical therapy technologies.

The clinic has an extensive fleet of light therapy/diagnostic equipment, which is constantly updated in line with new technical developments. In addition to a UVA1 high-pressure radiator, an indoor full-body daylight PDT system was added as the latest achievement.

The radiotherapy sector comprises two ultramodern X-ray devices for the superficial radiotherapy of skin cancer and selected refractory inflammatory diseases. Over 3,000 treatments are performed each year.

The Department of Dermatology has a long-standing interest in the application of laser technology. The laser therapy and aesthetic dermatology unit attracts patients from all over the world seeking treatment for

aesthetic and skin conditions. We perform a full range of laser procedures, such as permanent hair removal, tattoo removal, laser treatment for vascular disorders, both fractional and traditional resurfacing, CO2 and erbium treatments, and skin tightening procedures. In addition to the various laser platforms, the technical equipment also includes IPL and radiofrequency systems. We also offer numerous other treatments such as botulinum toxin injections, soft tissue fillers and chemical peels.



Dr. L. Imhof pursues interdisciplinary collaborations and scientific projects with, among others, the plastic surgery, angiology, infectious diseases, gynecology and visceral surgery departments.



#### Allergy unit

## Diagnosis and management of the full range of allergic

Allergic diseases are increasingly common. We cover the full range of allergies from allergy-related skin diseases such as atopic dermatitis, urticaria and contact dermatitis, but also inhalant allergies such as rhinoconjunctivitis and allergic asthma due to pollen, mites or pets, as well as increasingly prevalent allergies and intolerances to food. Allergies to honey bees and wasps are also diagnosed and can be treated with highly efficient ultra-rush immunotherapy regimens. For drug allergies, we provide a full range of skin tests, state-of-the-art in vitro diagnostics such as BAT or modified LTT, provocation tests and various drug deactivation protocols. We maintain very close interdisciplinary ties with many other disciplines, sharing outpatient clinics and boards.



#### Education of patients and health professionals

Patient education is one of our top priorities. In addition to individual patient education for anaphylaxis, asthma and atopic dermatitis, we offer group courses, and also special meetings for rarer diseases such as hereditary angioedema and mastocytosis. With regard to the latter, an interdisciplinary board has been initiated by Dr. C. Lang, which allows us to treat these patients in accordance with the latest international guidelines and treatment protocols.

We also offer highly sought-after training opportunities to become board-certified specialists in allergies and immunology and training courses for allied health professionals.

#### Weekday inpatient ward

Headed by Dr. M. Nägeli, our weekday inpatient ward has a total of six beds for the provision of rapid, complex

in-patient workups and short inpatient therapies. This unit also provides extracorporeal photopheresis (four photopheresis machines (as of January 2017) and another four beds) – a form of immunomodulatory treatment – to stem cell transplant recipients suffering from graftversus-host disease, lung transplant recipients suffering from organ rejection, and cutaneous lymphoma (Sézary Syndrome) patients. The same floor is home to the bath therapy room, which is intended for the provision of complex dermatological therapies.

#### Our inpatient clinic

The inpatient clinic provides 36 beds for the treatment of particularly severe and extensive forms of skin disease. It is especially suited to patients with refractory atopic dermatitis, psoriasis, complex autoimmune diseases, as well as skin cancer patients suffering from metastatic melanoma or cutaneous lymphoma, or frail patients undergoing major skin cancer surgery for non-melanoma skin cancer. Photopheresis is offered to organ transplant recipients suffering from graft rejection, graft-versus-host-disease, and Sézary syndrome. The medical staff (Prof. T. Kündig, Prof. R. Dummer, Prof. J. Hafner, Dr. M. Nägeli, Dr. A. Binkert, Dr. D. Muggli, together with a team



of staff physicians and residents) and the team of specialized nurses (M. La Roche, H. Müller and team) apply their extensive knowledge and experience in order to provide the best possible care for severe skin diseases.

The high level of therapeutic support, commitment and the friendly atmosphere are highly valued by the patients.

#### **Nursing care**

In February 2019, A. Andreoletti, who was responsible for the inpatient part of nursing as department head, left the hospital. In May 2020, she was replaced by M. La Roche, who took over the position of department head of the Dermatology ward. During the transition period, the ward was managed by B. Freyhof, the department head of the Rheumatology ward. We would like to take this opportunity to thank B. Freyhof for her commitment to the Department of Dermatology. Over the last few months a stable and efficient team has been formed under the leadership of M. La Roche, which has been instrumental in meeting the high demands of an efficient health care system. The high quality of care was maintained through the use of new processes.



In October 2020, 95% of the outpatient part of the Department of Dermatology was spatially separated from the inpatient part when the team left the building of the Department of Dermatology at the University Hospital Campus and relocated to the Circle at Zurich Airport.

The corona pandemic also presented new challenges to our staff on the ward. During the pandemic, Heiko Müller, dermatology clinical nurse specialist, supported the Department of Dermatology in the preparations and implementation of the measures.

#### **Laboratory facilities**

The laboratories of the department are dedicated to routine diagnostic procedures and research. The routine diagnostics is headed by PD Dr. P. Bosshard. The five labs for allergology, dermatopathology, molecular diagnos-



# "Passionate about patient care and staff training."

Prof. Jürg Hafner Head Inpatient Clinic, Dermatosurgery, Angiology University Hospital Zurich

tics, mycology, and serology/venereology are state-of-the-art equipped and accredited according to ISO 15189:2012. The TÜV SÜD certified research laboratories comprises six competitive research groups that perform basic, applied, and translational research all fields of dermatology, including skin cancer, allergy and inflammatory skin disease.

#### Dermatopathology

Our dermatopathology team under the lead of PD Dr. J. Kamarachev, examines and diagnoses 30,000 samples per year and provides sample testing for formalin-fixed tissue and cryomaterial (frozen section), and specific immunopathological tests (immunohistochemistry, immunofluorescence). In collaboration with the molecular diagnostics lab, we provide tests for pathogen search or suspicion of lymphomas.

Our dermatotopathology lab is a certified teaching center and organizes regular courses in dermatology for residents in collaboration with the European Academy of Dermatology and Venereology (EADV).

## Allergology, molecular diagnostics, mycology and syphilis serology

These labs together analyze 15,000 patient samples a year. The allergology lab provides among other things microarray-based IgE testing (ISAC) and the basophil activation test (BAT) for drug allergies. In molecular diagnostics, pathogen detection tests such as a HSV-VZV multiplex PCR or a genital ulcer disease multiplex PCR are performed. The mycology lab is renowned as a reference laboratory, in particular for dermatophyte infections. Last in the syphilis serology lab approximately one tenth of new syphilis cases in Switzerland are detected.

#### **Research laboratories**

The research unit of the Department of Dermatology has been constantly expanding during the last 13 years. Today, approx. 60 researchers are working in the laboratories, which are headed by Prof. T. Kündig. While the research groups have been split on three different sites the last seven years, in February 2021, the labs moved in to brand new research laboratories in Wagistrasse 18 in Schlieren.

The labs contain state-of-the-art equipment in order to perform competitive research in the fields of biochemistry, molecular biology, cell biology, immunology and allergy. Being the new home for many other research departments and institutes of UHZ and UZH, the Schlieren research Campus also offers many shared research facilities as to perform experiments and studies, e.g. flow cytometry, genomics, imaging, and modern animal facilities. The Dermatology research labs are certified according to ISO standards, and the labs comply with GCP guidelines for research with patient samples.



"The Covid impact is clearly evident in 2020. However, we have done everything we can to keep the impact low and have also provided telemedical care for our patients."

Alex Kitzinger Clinical Manager



			Financial Key Facts							
	2016	2017	2018	2019	2020					
Number of Leaves in Inpatient Clinic	1′344	1′601	1′627	1′827	1′648					
Ouration of stay of Inpatients (average)	6.4	5.5	5.4	4.7	4.8					
Casemix-Index	0.947	0.873	0.869	0.847	0.893					
Number of Outpatients	22′594	23′010	23′793	23'620	22′309					
Consultations Outpatient setting	70'844	74′120	75′433	74′367	67′577					
Taxpoints (Outpatient setting in thousand)	17'681	19′368	19'699	20'872	19'815					
Revenues	51′914	59′167	62′182	68'260	65'699					
Biopsies Dermatopathology	30′212	30′191	30′100	31′282	32′133					

# Partial move to UHZ Airport/"The Circle" and relocation of laboratories to Schlieren "WAGI site"

#### a. Relocation to out-patient setting to UHZ Airport/ "The Circle"

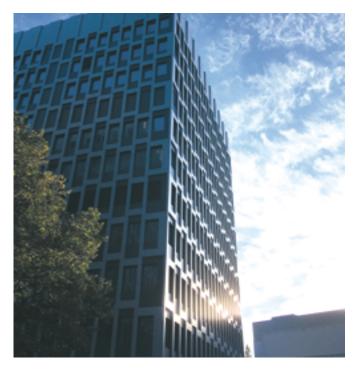
Partial move/relocation to the airport - "The Circle" After more than six years of planning and about 18 months of detailed preparatory work, the dermatology clinic of the UHZ has moved with most of its outpatient department to the largest free-standing outpatient clinic in Europe – the UHZ Airport – in the building complex "The Circle". As the largest department at the UHZ Airport, the dermatology clinic moved to an entire floor on the top floor of the building complex. The areas - laser, light and X-ray therapy, the outpatient clinic, dermatooncology, research including the day clinic and allergology – are now spread over area of over 3000 m<sup>2</sup>. In preparation for the move, operations were interrupted for the affected areas for four days. In the weeks prior to the start of operations, 25 walk-throughs took place, during which the clinic's employees were able to get to know the premises and conditions. A moving company assisted the clinic with the move, transferring over 450 moving boxes and 98 pieces of medical equipment. After a test operating day and a gradual increase in clinic operations over a period of three weeks, up to more than 300 dermatological patients per day have been treated again since the end of November 2020.



#### b. Relocation to laboratories to Schlieren "WAGI site"

As the old Dermatology building at Gloriastrasse 31 is the first to be demolished in order to build the new UHZ, the laboratories of our department also had to find a new location, which was found at Wagi-Strasse in Schlieren. All our laboratories, the routine diagnostics and the research labs, will move into the brand-new WAGI18 tower (see photo) in spring 2021.

The Wagi site has become a research and laboratory area where several new buildings have been built in the last few years, among them three such towers. The UHZ will rent labs in several of these buildings. The dermatology labs will be located on the first two floors in WAG118. Our new labs will be fully equipped and enable state-of-the-art diagnostics and research. The routine diagnostics with dermatopathology, allergology, mycology and serology and the biobank team with a total of approximately 30 employees will occupy the ground floor, while the various research groups with a total of almost 50 scientists will be placed on the first floor.



# COVID-19 Situation – Testing

#### COVID-19 testing at the Department of Dermatology UHZ

The laboratory of the UHZ Department of Dermatology temporarily became the SARS-CoV-2 testing laboratory of the UHZ.

In March 2020, the UZH faced an emergency situation as hardly any SARS-CoV-2 tests were available. In mid-March, the hospital management gave the Dermatology Clinic laboratory the task of establishing a SARS-CoV-2 testing center. Under the direction of Prof. Mitch Levesque, (research group leader) and PD Philipp Bosshard, (laboratory manager FAMH of the accredited routine laboratories), the team set to work under high pressure; five RNA extraction methods and four PCR methods were evaluated in parallel. After only 10 days, we were able to successfully test the first samples. In addition, we produced our own swab sets and set up all the logistics up to reporting the results to the FOPH.

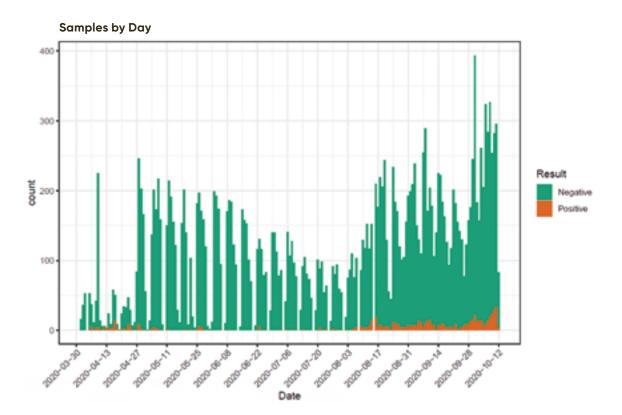
From March to October, the COVID-19 team from the UHZ Department of Dermatology performed over 20,000 SARS-CoV-2 PCRs for the UHZ, with about 3% being positive (see figure). The team worked very hard, and thanks to evening and weekend services the results could be reported within 24 hours in most cases.

Another highlight was when we helped the city of Zurich by swabbing all the residents of a nursing home on site with a mobile team, and then tested them in the laboratory.

Since October 12 testing has been performed in the Department for Immunology on a new, fully automated Cobas6800 machine. We are proud that our laboratory was able to help the UHZ and thus many patients in this exceptional situation.



Daily Meeting Team Physicians – out door due to COVID-19-restrictions, Summer 2020



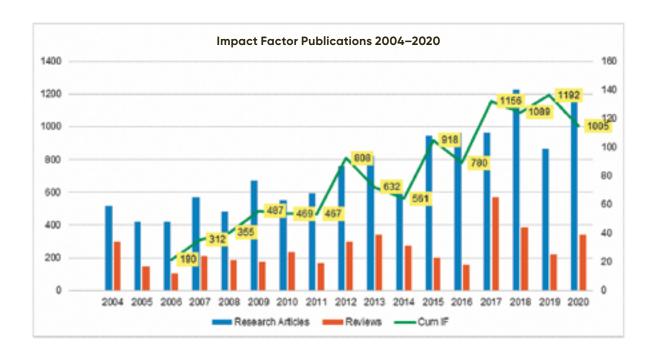
# 7 Research

One of our ongoing aims is to improve the quality of our services for patients. We are committed to the highest level of research in dermatology. Our achievements in this field – as judged by the cumulative impact factors for 2019 and 2020 (1,082 and 1,000) – position us among the world's leading departments.

Our research activities focus primarily on basic, patient-oriented translational and clinical research in dermato-oncology, where we concentrate on the pathogenesis, early diagnosis and targeted treatment of skin cancer, particularly in melanoma, cutaneous lymphoma and non-melanoma skin cancers. Immunodermatology is also a research focus, in particular innate immunity and T-cell biology in inflammatory skin diseases, notably psoriasis, neutrophilic dermatoses, cutaneous drug eruptions and severe allergic adverse drug reactions. Allergy research is centered on atopic dermatitis, drug and food allergies, and immunotherapy.

#### The aim of our research activities is to:

- promote high-quality research with clinical relevance in the defined fields of focus
- promote intensive networking and collaboration with other institutes and departments at the University of Zurich and ETH, and through active participation in networks such as Cancer Network Zurich and Life Science Zurich
- support fellowships abroad in excellent research institutions and maximize competitive research funding, including from the Swiss National Science Foundation (SNF professorships)
- create endowed professorships in our department for inflammatory skin disease, skin cancer and allergy, with the aim of recruiting and retaining leaders in these r esearch fields.



#### Key figures and highlights

Approximately 40 clinical trials on new therapeutic approaches for skin disease are ongoing, corresponding to around 19% of all studies performed at UHZ. In 2020, our department published more than 135 original research articles and approximately 39 reviews in peer-reviewed journals.

A recent publication in the Journal of the American Academy of Dermatology (JAAD) ranked Prof. R. Dummer within the 5 most cited authors in Dermatology (2019)\*.

## A number of original publications have appeared in interdisciplinary journals, including:

Dummer R, Brase JC, Garrett J, Campbell CD, Gasal E, Squires M, Gusenleitner D, Santinami M, Atkinson V, Mandalà M, Chiarion–Sileni V, Flaherty K, Larkin J, Robert C, Kefford R, Kirkwood JM, Hauschild A, Schadendorf D, Long GV. Adjuvant dabrafenib plus trametinib versus placebo in patients with resected, BRAFV600–mutant, stage III melanoma (COMBI–AD): exploratory biomarker analyses from a randomised, phase 3 trial. Lancet Oncol. 2020;21(3):358–372 IF 35.386

Dummer R, Hauschild A, Santinami M, Atkinson V, Mandalà M, Kirkwood JM, Chiarion Sileni V, Larkin J, Nyakas M, Dutriaux C, Haydon A, Robert C, Mortier L, Schachter J, Lesimple T, Plummer R, Dasgupta K, Gasal E, Tan M, Long GV, Schadendorf D. Five-Year Analysis of Adjuvant Dabrafenib plus Trametinib in Stage III Melanoma. New England Journal of Medicine 2020 doi:10.1056/NEJMoa2005493 IF 74.699

Dummer R, Lebbé C, Atkinson V, Mandala M, Nathan P, Arance A, Richtig E, Yamazaki N, Robert C, Schadendorf D, Tawbi H, Ascierto P, Ribas A, Flaherty K, Pakhle N, Campbell C, Gusenleitner D, Masood A, Brase J, Gasal E, Long G. Combined PD-1, BRAF and MEK inhibition in advanced BRAF-mutant melanoma: safety run-in and biomarker cohorts of COMBI-i. Nature Medicine volume 26, 1557–1563(2020) IF 36.130

Olomski, Florian; Fettelschoss, Victoria; Jonsdottir, Sigridur; Birkmann, Katharina; Thoms, Franziska; Marti, Eliane; Bachmann, Martin F; Kundig, Thomas M; Fettelschoss-Gabriel, Antonia. Interleukin 31 in insect bite hypersensitivity – Alleviating clinical symptoms by active vaccination against itch. Allergy 2020 75:862-871 IF 8.706

Dummer R, Ascierto PA, Nathan P, Robert C, Schadendorf D. Rationale for Immune Checkpoint Inhibitors Plus Targeted Therapy in Metastatic Melanoma. JAMA Oncology 2020 doi:10.1001/jamaoncol.2020.4401 IF 13.860

#### SSS Weekend – the annual research retreat of the Department of Dermatology

In March 2019, the 24th annual and internal research retreat (SSS Meeting: Science, Sun, and Snow) took place over two days at the Arabella Hotel in Davos. The scientific program comprised five sessions with 49 oral communications of 7–15 minutes each from master students, PhD students, postdocs, other scientists, and clinicians in the department, and the presentations were followed by intense plenary discussion. Moreover, to enable researchers to practice science communication and to share scientific knowledge and outcome with each other, the SSS meeting also serves to foster new collaborations and projects between researchers within the department, for which reason coffee breaks, dinners, and other social events play an important role.

The 2020 edition, which was supposed to mark the 25th anniversary of the SSS meeting, had to be canceled due to the corona crisis. A substitute meeting was then organised on three days, with each meeting featuring 8–12 presentations by in-house scientists and clinicians. While the first meeting was held live at UHZ, the two last meetings were virtual. Because of extensive departmental initiatives related to the development and research on COVID–19 diagnostics and vaccines, the meeting on August 21 was devoted to the corona crisis. The themes of the two last meetings were Skin Cancer (October 23) and Allergy & Skin Inflammation (January 7, 2021).



"We are proud to be at the forefront of clinical and basic research in dermatology."

Prof. Th. Kündig Chairman of the Department of Dermatology UHZ University Hospital Zurich

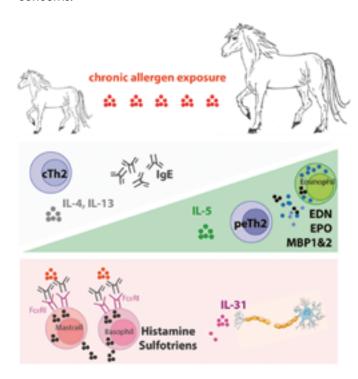
#### a. Research projects in focus

In this report, we would like to look at four of our 14 research groups in more detail in order to demonstrate the scope of research in our department.

#### 1. Acute versus chronic allergy:

Dr. Antonio Gabriel (-Fettelschoss) and team

Allergies are not only common for humans, but they are also very common for animals, in particular our animal companions. The most common allergy in horses is insect bite hypersensitivity (IBH), a seasonal recurrent allergic dermatitis accompanied by strong pruritus<sup>1-5</sup>. Recently, we identified two key players of disease pathology, i.e. eosinophils and Interleukin (IL)-31. Besides tissue eosinophilia, eosinophil levels in blood correlated well with disease severity suggesting a key role for eosinophils in tissue damage<sup>6</sup>. The Th2-derived cytokine IL-31 linking the immune and nervous system was shown to be exclusively expressed in IBH skin lesions, whereas it was absent in non-lesional or healthy skin7. Furthermore, we have developed two new virus-like particle (VLP)-based therapeutic vaccines targeting eosinophils or targeting the allergic pruritus by an IL-5-VLP or IL-31-VLP vaccine, respectively. We tested clinical efficacy and safety for both vaccines in several clinical trials<sup>6-8</sup>. Both vaccines were tolerated well, induced strong antibody titers against IL-5 or IL-31, respectively, significantly reduced skin symptoms in IBH affected horses and so far, did not reveal any safety concerns.



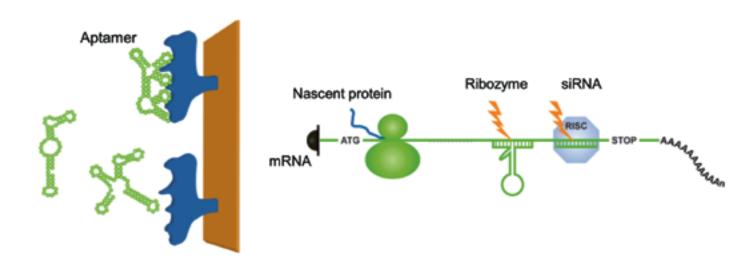
The particular role of eosinophilia in chronic phases of allergies is not completely understood. Early phases of IBH may be dominated by IgE and conventional (c)Th2 cells. By contrast, chronic allergen exposure may cause a transition towards IL-5-positive pathogenic effector (pe) Th2 cells promoting eosinophilia. IBH occurs naturally in approximately 20–30% of horses in Switzerland and resembles a natural allergic disease in a higher mammal with normal chronicity as expected for humans, making IBH a model for human allergies.

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#### 2. mRNA therapies:

PD Dr. Steve Pascolo and team



RNA is assumed to be the molecule at the origin of life and in fact can fulfill all activities of the living: containment of genetic information (used medically in the form of mRNA), formation of tertiary structure (used medically in the form of aptamers), control of gene expression (used medically in the form of siRNA) and enzymatic activities (ribozymes, not yet approved as a drug¹).

Drugs based on mRNA have been developed for over thirty years² and provided the first approved vaccines against COVID-19³. The potential of mRNA-based therapies includes vaccines against any types of infectious agent, cancer and allergies but can be extended to the non-immunogenic expression of therapeutic proteins (e.g. antibodies) as well as to the complementation of a genetic defect (e.g. cystic fibrosis). In order to foster the development of the therapeutic potential of mRNA, in 2016 we created the mRNA platform at URPP "translational cancer research" (https://www.cancer.uzh.ch/en/Research/mRNA-Platform.html) in the Dermatology department of UHZ. Through this platform we continuously optimize the design⁴ and production⁵,6 of mRNA as well as its formulation for utilization in vitro and in vivo.

We established many collaborations in UHZ, UZH and ETH, whereby scientists use our mRNA to develop and validate new therapies. We expect that some of these approaches can be translated into clinical trials at UHZ.

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## 3. The role of the NLRP1 inflammasome in inflammation and cancer development in human skin:

Prof. Dietmar Beer and team

(Most patients seeking help in dermatological clinics suffer from either inflammatory skin disease or skin cancer. Skin cancer is the most frequent type of cancer in Caucasians with about 90% of all cases derived from keratinocytes, termed white skin cancer. UVB radiation is considered the most predisposing factor for skin cancer development and is absorbed by the keratinocytes of the epidermis, the outermost layer of the skin. UVB is a complete carcinogen due to its ability to damage DNA directly and by inducing inflammation, a hallmark of cancer development.

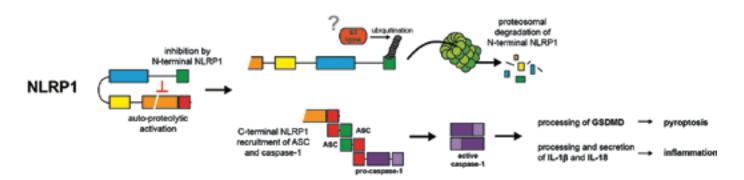
UVB irradiation of human keratinocytes induces activation of the NLRP1 inflammasome, which most likely underlies the induction of sunburn in humans<sup>1, 2</sup>. Inflammasomes comprise a group of protein complexes expressed mainly by immune cell, and assemble upon sensing many different pathogens and danger signals<sup>3</sup>. Inflammasome complex assembly results in activation of the protease caspase-1, which in turn induces inflammation upon cleavage and activation of the proinflammatory cytokines prolL-1\beta and -18 and of gasdermin D. The latter causes a lytic type of cells death supporting the release of IL-1β and -18 and other pro-inflammatory molecules. Most importantly, patients with gain-of-function mutations of the NLRP1 gene suffer from chronic skin inflammation and are predisposed to develop squamous cell carcinoma (SCC), a major type of white skin cancer4.

As the NLRP1 pathway is not conserved between mice and humans<sup>5</sup>, we combined the generation of keratinocyte knockout cells by the CRISPR/Cas9 technique2 with an organotypic three-dimensional skin model based on human skin cells<sup>6</sup>. With this novel research model, we analyzed NLRP1-induced pathways in epidermal keratinocytes and dermal fibroblasts as well as their crosstalk

using a transcriptomic approach. Our research aims to identify novel inflammatory and carcinogenic pathways that can be pharmacologically targeted. Moreover, we are characterizing the molecular mechanisms underlying NLRP1 inflammasome activation in keratinocytes in a physiological trackable model system resembling human skin.

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The molecular mechanism underlying NLRP1 inflammasome activation<sup>7</sup>

#### 4. Edible insects as allergens InFood study:

Head: Dr. Carole Guillet

Group: Prof. Peter Schmid-Grendelmeier

Allergies to house dust mite allergens are widespread; cross-reactions to seafood are also often found, some of which can cause severe food allergy. In Switzerland, 3 insect species have been approved as food since May 2017. Since insects contain similar potential allergens as to seafood and house dust mites – such as the protein tropomyosin – we would like to investigate the risk of food allergies to these edible insects.

For this purpose, we have developed our own standardized skin test solutions and in vitro tests (basophil activation test). In a prospective comparative study we are now investigating patients with allergies to house dust mites and/or seafood as well as persons involved in the production of insects as food.



"One key to our success in dermatology research is the scientific and medical interdisciplinarity, and with that, we enable future medicine."

Prof. Pål Johansen Deputy Head of Research University Hospital Zurich



#### b. Research groups



Prof. Barbara Ballmer-Weber

#### **Group Members and Associates**

Prof. Barbara Ballmer-Weber (group leader)
Dr. Claudia Lang
Muriel Träxler (technician)

#### Main Fields of Research

Our research activities are focused on food allergy, in particular pollen-related food allergy. We are especially involved in the identification and molecular characterization of important cross-reactive allergens, and the development of diagnostic and therapeutic methods based on recombinant allergens. Allergen-based or component resolved diagnosis in food allergy is a major topic of our research group. Another important aspect of our research activity is risk assessment in food allergy with regard to genetic modified foods/novel foods but also threshold doses (minimal allergen doses to induce an allergic reaction) of plant and animal food allergens.

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Prof. Hans-Dietmar Beer

Prof. Hans-Dietmar Beer
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Dr. Serena Grossi (Postdoc)
Paulina Henning, PhD student
Michela die Filippo, PhD student
Tugay Karakaya, PhD student
Gilles Bilfeld. Master student



#### Main Fields of Research

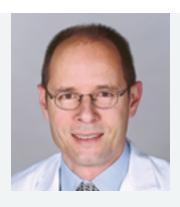
The group aims to characterize the molecular mechanisms underlying inflammation and cancer development in human skin. The focus in these processes is on the roles of the NLRP1 inflammasome expressed by epidermal keratinocytes. Studies are based on patient-derived primary cells, mainly on keratinocytes but also on skin cancer cells and (cancer-associated) fibroblasts. The dermal-epidermal crosstalk of wild type and genetically modified cells (e.g. by the CRISPR/Cas9 technique) is analyzed in a three-dimensional organotypic skin model. State-of-the-art transcriptomics and proteomics approaches are used to identify novel regulatory pathways underlying skin inflammation and cancer development.

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PD Dr. Philipp P. Bosshard

PD Dr. Martin Glatz
PD Dr. Yvonne Achermann
Bettina Schmid, PhD student
Julia Prinz, Msc
Riccardo Curatolo, MD student
Moritz Klinger, MD student
Nada Juricevic, technician
Muriel Träxler, technician

#### Main Fields of Research

Our research activities focus on skin infections and pathogen-host interactions. Our main interests are bacterial infections (e.g. sexually transmitted infections; periprosthetic joint infections), fungal infections (e.g. dermatomycosis), viral infections (e.g. SARS-CoV-2) and the role of the human skin micro-biome in inflammatory skin diseases such as atopic dermatitis. This comprises epidemiological studies, development and improvement of diagnostic tools for skin infections (e.g. PCR) and research on the human skin micro-biome (e.g. next generation sequencing).

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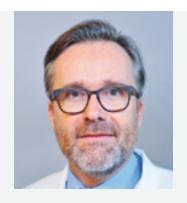
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**Prof. Ralph Braun** 

Dr. Florentia Dimitriou

Dr. Michael Kunz

Dr. Thierry Nordmann

#### **Main Fields of Research**

Our main interest is non-invasive diagnosis of skin cancer, especially malignant melanoma. We use established techniques such as dermoscopy as well as new techniques in vivo laser scanning microscopy. We also have a strong interest in artificial intelligence.

Due to different international research collaborations, our patients benefit directly from the latest technological developments. Detecting skin cancer, especially melanoma, at early stages offers a unique opportunity because, if diagnosed early enough, skin cancer can be cured.

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Prof. Dr. Dr. Marie-Charlotte Brüggen

Reihane Ziadlou, PhD, PostDoc Nick Li, technician Danielle Fehr, PhD candidate Martin Ringel, MD candidate Michaela Mokra, MD candidate Dr. Veronika Schmidt Lena Hirt, master student Mirjam Meier, master student Milad Ameri, bioinformatician Marine Casanova, master student

#### **Main Fields of Research**

Our group is interested in exploring the cutaneous immune system under homeostatic conditions and in the setting of inflammatory and allergic skin diseases, and in exploring the impact of environmental factors such as microbes and nutrition in this context. We thereby aim at ultimately improving prevention and treatment approaches. The main diseases we are looking at are severe drug hypersensitivity reactions and atopic dermatitis. We also explore the immunological functions of the poorly investigated subcutaneous adipose tissue and how these interfere with cutaneous inflammation.

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**Prof. Reinhard Dummer** 

Dr. Joanna Mangana

Dr. Phil Cheng, Dr. Egle Ramelyte; Daniel Hug; Sabine Ludwig; Ramon Stäger; Dr. Corinne Eggenschwiler; Corina Kaufmann; Johanna Ziegler; Elena Fernandez-Lopez; Marie-Luise Hilbers; Isabella Dommann; Melike Ak; Aurelio Börlin; Florentia Dimitriou; Dr. Dr. Desislava Ignatova

#### Main Fields of Research

The team has established a world-class skin cancer center providing the best clinical care connected to translational and clinical research. We intensively investigate the immune biology of cutaneous lymphomas, cutaneous melanoma and epithelial skin cancers. Based on the microenvironment of these tumors, we have established immune interventions in cell cultures and animal models. Translational research applies this new knowledge to our patients in order to provide effective treatment with the best quality of life. Recently we invested in investigator- initiated clinical trials combined with sophisticated next generation high throughput technologies such as single cell analysis. We also focus on high quality clinical data management that allows to integrate translational data with clinical findings.

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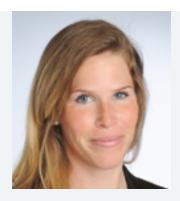
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Dr. Antonia Gabriel (-Fettelschoss)

Dr. Jürgen Bader, Dr. Fabia Canonica, Dr. Sigridur Jonsdottir; Katharina Birkmann DVM ECEIM; Victoria Fettelschoss, Master; Juwela Lam, Master; Florian Olomski, Master; Tanya Rhiner, Student

#### Main Fields of Research

Our main research area is translating immunology of chronic diseases or hyperreactivities such as allergies into new cutting-edge therapeutic vaccines. Our virus-like particle (VLP)-based therapeutic vaccines target key molecules involved in disease pathology and, in contrast to other biologicals, are an inexpensive and effective way of treating chronic disorders. Thus, advanced technology can become available even to our companion animals. One of our main interests are skin-related problems in horses. The most common chronic allergic dermatitis in horses is caused by insect bites. Insect-bite hypersensitivity (IBH)-affected horses suffer from pruritic skin lesions, caused by type-I/type-IVb allergic reactions accompanied by prominent eosinophilic infiltration into the skin. We study the interplay of underlying allergic reactions in early and chronic stages of disease. IBH in horses shares common features with human asthma. Thus, we believe understanding the molecular mechanisms in such allergic reactions can be translated to other species including humans allowing to improving treatment modalities in the future.

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**Prof. Jürg Hafner**Division of In-Hospital Dermatology and Surgical Dermatology

#### **In-Hospital Dermatology:**

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PD Dr. Marjam Barysch-Bonderer, Dr. Sabine Bruckert, Dr. Christian Greis, PD Dr. Severin Läuchli, Dr. David Muggli, Dr. Carla Murer, Dr. Stephan Nobbe, Dr. Maya Wolfensperger

#### Vascular Medicine, Wound Healing:

PD Dr. Florian Anzengruber, Dr. Michael Kockaert; Research Corporation: Dr. Caroline Buset, Dr. Julia Deinsberger\*, Philomena Gujan, Dr. Dr. Barbara Meier-Schiesser, Dr. Dr. Benedikt Weber\*

#### Main Fields of Research

Dermatology in severely ill patients; Dermatology in immunosuppression; Dermatologic oncology; Prurigo nodularis

Dermatologic surgery and surgical oncology, Mohs surgery, local anesthesia Phlebology and wound healing, compression therapy

SKINTEGRITY.CH (Principle Investigator)

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Medical master students: Simon Christiansee, Alexandra Chabot, Selina Kobelt, Rita Rüega, Delia Rüethschi,

Joshua Rust, Tanja Triaca and Audrey Wallnöfer

#### Main Fields of Research

New approaches in allergen immunotherapy (AIT) are being investigated. Intralymphatic allergen immunotherapy (ILIT) is the direct injection of allergens into lymph nodes. ILIT studies suggest that the number of injections can be greatly reduced due to better targeting of the allergen to the immune system. Morover, epicutaneous immunotherapy (EPIT) with allergen patches was developed to be patient friendly due to self-administration. EPIT is currently in commercial development for the treatment of food allergies in children. Another method uses non-infectious virus-like particles (VLPs), which serve as a carrier or adjuvant for allergens to increase immune strength without promoting the allergen-specific side effects. We also use VLPs in a new category of allergy vaccines that can be administered to animals to render them less allergenic to humans. Two new projects deal with difficult allergies and when conventional AITs may be associated with severe adverse events. One project involves the mapping of IgG-binding epitopes on allergens for the design of better and safer AITs. The other involves development of therapies against food allergies based on monoclonal antibodies (mAbs). Finally, v accination that protects against cancer is an old dream in medicine. We combine photochemical substances and light (PDT) with antigens to controlled delivery of the vaccine to immune cells (photochemical internalization, PCI), which in turn activate killer cells that can fight the tumour.

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#### Main Fields of Research

Our main research focus is on skin cancers, primarily Melanoma, which we approach from a translational perspective. With access to the live-cell biobank in the Dermatology Department at the University Hospital of Zürich, we have developed new methods and large retrospective cohorts for discovery and validation studies. Although the treatment options for melanoma patients have dramatically improved over the last decade, the identification of biomarkers for more effective patient stratification and the development of new drug targets remains a critical goal of the next decade of precision medicine research.

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#### Main Fields of Research

Inflammatory skin diseases are frequent in number and often lead to a decreased quality of life in the affected patients. Although intense research in the field has already led to successful treatment of a number of these diseases, several questions still remain to be addressed. We aim to investigate the innate and adaptive immune pathways leading to i) severe adverse drug reactions, i.e. acute generalized exanthematous pustulosis ii) lichenoid skin diseases and iii) cancer-drug induced lichenoid skin reactions iii) autoinflammatory syndromes. The goal of our research is to open up new relevant research avenues and to identify new therapeutic targets in difficult-to-treat diseases.

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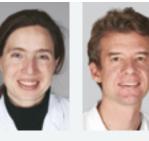
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#### Main Fields of Research

Our research activities are focused on epidemiology, pathophysiology and treatment of allergic diseases, namely atopic dermatitis and increasingly also mastocytosis, food and drug allergy. We also investigate new therapeutic options in a variety of diseases, mainly atopic dermatitis, urticaria and eosinophil-related diseases. Recently we have also started to establish digital educational tools to promote knowledge and training in allergic diseases, also in a global contexts.

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# O Clinical research: Department Of Dermatology UHZ, Clinical Trial Unit

Clinical research gains increasing importance and is a major focus at academic centers such as ours. It is essential not only to translate basic research into beneficial treatment regimens, but also to learn from the conducted trials by integrating translational research projects into daily practice. The increasing complexity of contemporary clinical trials requires a well-regulated network, which combines clinical, ethical, legal and economic aspects.

A team of clinical trial specialists, including physicians, study nurses and assistants, clinical trial pharmacists, study coordination, finance, quality management and data management team, is necessary to ensure frictionless integration of clinical trials into the treatment strategy for the respective disease.

The Clinical Trial Unit within the Department of Dermatology is a major research center for the development of targeted therapies and immunotherapies for skin cancers and immune-mediated skin diseases. Throughout the years, we have collected extensive experience in early and late phases of clinical development (phase I-IV). The Clinical Trial Unit is certified by the Swiss Association for Clinical Cancer Research (SAKK) to perform phase I trials/first-in-human (FIH) studies since September 12, 2016 and offers a post-graduate study in pharmaceutical medicine. The unit also has its own clinical trial pharmacy with four dedicated trial pharmacists, who have established pharmaceutical management processes that have further elevated the level of quality for our trial patients.

In recent years, the Clinical Trial Unit has worked with many therapeutics for a large number of dermatooncologic and dermatologic indications. Some of the disease entities for which we conducted clinical trials are:

- Melanoma (metastatic, neoadjuvant and adjuvant setting)
- Non-melanoma skin cancer (basal cell carcinoma, squamous cell carcinoma, Merkel-cell carcinoma)
- Cutaneous T- and B-cell lymphoma
- Psoriasis vulgaris
- Psoriasis pustulosa
- Urticaria
- Mastocytosis
- Pyoderma gangrenosum
- Atopic dermatitis
- Hidradenitis suppurativa

Among other molecules, we also worked with the following small molecules, immunotherapies and biologics:

- BRAF and MEK inhibitors
- Pan-RAF inhibitors including RAF265, LXH254
- Pan-Kinase and tyrosine kinase inhibitors including nilotinib, pazopanib, lapatinib and sorafenib
- VEGFR inhibitors, such as lenvatinib
- Hedgehog pathway inhibitors
- Histone deacetylase inhibitors (HDACi)
- RXR retinoids
- Immune checkpoint inhibitors (ICI), such as anti-CTLA-4, anti-PD1, anti-PDL1 and anti-LAG3 antibodies
- Bi-specific protein targeting T cell receptors for IMCgp100
- Combination therapies with ICI and kinase inhibitors, such as vemurafenib, cobimetinib, ribociclib and lenvatinib
- Combination of different immunotherapy agents including anti-PD1, anti-LAG3 and IDO1 inhibitor epacadostat
- Sting agonists, and anti-M-CSF antibodies, MDM2 inhibitors
- Oncolytic therapy with T-VEC, Coxsackievirus A21, Allovectin-7, adenointerferon gamma and canary pox viral vectors
- Cancer vaccines
- Antimicrobial agents (taurolidine)
- Somatostatin-analogons
- Antisense-BCL-2 nucleotides
- Cytokine fusion proteins
- PEG interferon
- NAD+ biosynthesis inhibitors
- Purine nucleoside phosphorylase inhibitors
- TRL agonists, such as resiquimod
- TNF-α inhibitors
- IL-12/23 inhibitors
- IL-17A and IL-17R inhibitors
- IL-23 inhibitors
- IL-4 R inhibitors
- IL-1β antagonists
- IL-1Ra soluble receptor
- Anti-IgE inhibitors
- PDE4 inhibitors
- Other molecules

We are experienced in investigator initiated trials (IITs) for the treatment of orphan diseases. The focus of our IITs is on dermato-oncology and inflammatory skin diseases.

Our dermato-oncological IITs focus on skin cancer and for sub-groups of skin cancer patients with high medical requirements, such as those with melanoma brain metastases or patients treatment resistant non-melanoma skin cancers. The inflammatory IITs of our clinical trials unit focus on psoriasis vulgaris and pustulosa,

pyoderma gangrenosum and hidradenitis suppurativa. Furthermore, we also place emphasis on allergological IITs such as urticaria, mastocytosis and atopic dermatitis. To better understand, among other things, the realworld efficacy, drug survival and burden of disease we include most psoriasis patients with a new systemic anti-psoriatic treatment (conventional or biologics) in our SDNTT register (Swiss Dermatology Network for Targeted Therapies). Zurich includes most patients per year.



Our clinical trial unit is one of the leading clinical research centers in Europe: PD Dr. Julia-Tatjana Maul, Prof. Dr. Reinhard Dummer, Dr. Egle Ramelyte.

### Quality Management

Quality Management (QM) plays a central and crucial role in the Department of Dermatology UHZ to ensure the claims defined in our mission statement.

#### Today, the Department of Dermatology UHZ is certified/accredited in different units/areas:



Department of Dermatology UHZ, Dermatology Venerology and Allergology including Clinical Research and Teaching, since 2011 ISO 9001:2015



Skin Tumor Center of the Department of Dermatology UHZ: DKG Deutsche Krebsgesellschaft, since 2011 (by Onkozert)



Department of Dermatology, Laboratories : ISO 15189:2013, since 2015 (via Swiss TS)



Allergy Unit of the Department of Dermatology UHZ: Specified certification and re-certification GA2LEN (Global Allergy and Asthma European Network)

www.ga2len.net

#### **QM-Team Dermatologische Klinik UHZ**

Overall Responsability, Head Prof. Dr. Thomas Kündig
QM – Management, Overall Coordination Catherine Frey-Blanc

Dermatooncology/Skin Tumor Center Dr. Joanna Mangana & Dr. Dr. Barbara Meier Schiesser

QM – Clinical/Medical Aspects (incl. CIRS\*) Dr. Mirjam Nägeli

QM – Morbidity & Mortality-Conferences Dr. Mirjam Nägeli, Dr. Olivia Messerli-Odermatt, Dr. David Muggli

QM – Complaints Medical Aspects Dr. Olivia Messerli-Odermatt, Dr. David Muggli

QM – Nursing Dermatology UHZ Campus: Heiko Müller / Dermatology UHZ Circle: Luigi de Matteis

QM – Research Prof. Pål Johansen, PhD

QM — Clinical Trials PD Dr. Julia-Tatjana Maul, Dr. Egle Rameylte, Séverine Buffoni, Jeannine Slavic

Accreditation Laboratories ISO 15189:2013 PD Dr. Philipp Bosshard QM – Manual/Directory & Complaint Management Catherine Frey-Blanc



"It is very enriching to manage the broad and challenging spectrum of QM aspects with such a highly professional and motivated team."

Catherine Frey-Blanc Quality Management Department of Dermatology University Hospital Zurich

Our QM team ensures the fulfillment of a wide range of tasks and is organized as follows. It is essential for our QM work that QM is practiced on a daily basis and serves as a guideline and support for the entire team to meet our high aims for the best possible patient care.

### In order to achieve this, we are guided by the following principles/guidelines:

- Commitment to QM and creating QM awareness among the entire team of the Department of Dermatology UHZ in the sense of a top-down management structure: 4–5x annual QM meetings with the entire management for the purpose of exchange, feedback and discussion of optimization possibilities for our patients.
- Interprofessional exchange within the department and interdisciplinary exchange across the UHZ
- Close networking and cooperation with QM committees within the UHZ
- Continuous, targeted training of QM team members, both externally and internally
- Establishment of a risk management system with intensive involvement of the top management level (department heads as risk owners)
- Partnership with certification/accreditation bodies (ISO-TÜV, Onkozert)

Over the last two years, under the overall responsibility of Prof. T. Kündig and the overall coordination of C. Frey-Blanc with the highly motivated QM team, QM in our clinic has received the desired and targeted status in an inspiring and enriching way.

The very positive outcome of the external audits in the past two years have confirmed that the chosen path has contributed significantly to the targeted overall quality standards of the department.

#### Three aspects in focus

#### CIRS (Critical Incidence Report System):

Monthly meetings take place with the responsible persons, Dr. Mirjam Nägeli, senior associate physician, and Heiko Müller, clinical nurse specialist, to evaluate the ward management – physicians and nursing staff, in order to evaluate the reports in the anonymous, CH-wide established CIRS system and, if necessary, to initiate improvements; thus, 21 and 24 (UHZ-wide approx. 1400) critical cases were recorded in 2019/2020. In addition to the introduction of specific measures, CIRS promotes interprofessional exchange between physicians and nurses in a very valuable way.

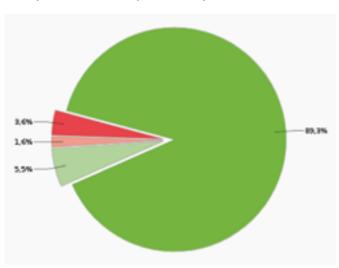
#### Skin Tumor Board UHZ:

In the spirit of interdisciplinarity – the USP (Unique Selling Proposition) of a university hospital – a specialist committee of senior physicians headed by Prof. R. Dummer and Dr. J. Mangana evaluates complex dermato-oncological patients at the UHZ skin tumor board on a weekly basis; delegates from various departments of the UHZ (Oncology, Nuclear Medicine, Pathology, Plastic Surgery, Neurosurgery, Otolaryngology, Radiation Oncology, Psycho-Oncology), evaluate and determine the next steps in diagnostics and treatment, and ensure the best possible care for this highly challenging category of patients.

#### Satisfaction surveys of patients and referring physicians

At the patient level, the clinic conducts an ongoing "Happy Or Not" survey, as well as a detailed survey with an interview (Survey–Monkey) once a year for approximately 250 patients. The results are very satisfactory, but also provide valuable impulses for optimization.

#### Example 2019–February 2020: 577 patients:



Every year we survey our referring physicians at our ZDFT congress (approx. 60–80 responses); the results are over 90% positive, but also show us minor optimization opportunities every year.

## Medical Training and Education

Medical education and training are essential for guaranteeing a high level of professionalism among physicians and healthcare professionals. Our ongoing commitment to education is seen in the following:

- Student education at the University of Zurich's medical faculty.
- Specialist training for resident physicians qualifying in dermatology and venereology, allergology, clinical immunology and phlebology.
- Ongoing medical education for private practitioners primarily dermatologists and allergologists, as well as general practitioners and (to a lesser extent) other healthcare professionals.

#### Student education

Senior physicians in our department provide an introductory dermatology course for third-year medical students, a yearly core course in dermatology (as part of an eight-day block) for fourth-year medical students, a case-based thematic lecture series and a practical training course in dermatology in the sixth year of the medical training curriculum at the University of Zurich. ETH Zurich has offered a curriculum for a Bachelor's degree in medicine since 2017. As part of this program, several members of our department are involved in teaching introductory modules in dermatology, immunology and allergology.

These ex-cathedra and bedside teaching activities had in the past been complemented by web-based learning modules using an online platform (Dermatology Online with Interactive Technology; DOIT), which was developed by our department under the direction of former chairman Prof. Gunter Burg in close collaboration with several other dermatology departments (Basel, Berne, Lausanne, Jena, Stadtspital Triemli in Zurich and the European Dermatology Forum; see also www.cyberderm.net). Now due to the COVID-19 pandemic, all lectures had been given only online via a Zoom platform; students followed the lessons at home, either live (with the possibility of submitting questions via Chat) or as recorded podcasts. Due to increasing numbers of patients testing positive for coronavirus, even practical patient examination courses had to be stopped and were replaced by online-case discussions. This is a huge

challenge for students and the faculty alike – however due to the existence of a large volume of already prepared digital material of our department, we were able to handle this task quite satisfactorily.

A lot of effort and time was invested into the creation of a joint Master program, including the Dept. of Dermatology of Cantonal Hospital Lucerne (Prof. Ch. Brand) and Cantonal Hospital St. Gallen (Prof. A. Cozzio). Under the guidance of the Medical Study Decanat common, revised and updated lecture program was established, based on modern educational methods and enforced interaction. While some lectures are given in the conventional manner as plenary lectures and shared with all three sites digitally, some of the teaching material is elaborated using interactive case discussions and problem-solving approaches, integrating entrustable professional activities (EPA). This joint master program started with the fall semester 2020 and has now been fully implemented.

This platform had been further improved under the direction of Prof. Peter Itin with the support of the European Dermatology Forum and is currently available in seven languages with two further languages scheduled. In 2009, the DOIT platform had been chosen as the best Internet-based teaching platform and won the Medida Prize (worth EUR 50,000).

In addition to a host of lectures and courses, a new course on "translational allergy" was launched with great success in 2017 and is now already being organized for the 4th time. Held at Hochgebrigsklinik Davos, this course has become highly popular in the meantime and is rated as "very useful" by the participants.

#### **Resident physicians**

The Department of Dermatology at UHZ is a training site for specialization in dermatology/venereology, in line with the training program approved by the Swiss Institute of Medical Education (SIME-SIWF). Four of the requisite five years of dermatology training can be completed on site. In addition to bedside work, the training program also includes regular structured teaching slots organized by our senior consultant Dr. M. Wolfensperger who is about to complete her additional degree as a Master of Medical Education MME.

Resident candidates must meet the following requirements:

- Two years of medical training at a Swiss hospital: either two years of internal medicine or one year of internal medicine and one year of surgery
- Finalized or pre-finalized MD thesis

Our staff provides opportunities to conduct scientific work alongside an MD thesis.

Three training positions are also available that cover part of the board certification in allergology and clinical immunology and angiology. During their residency training in our department, residents benefit from the most comprehensive program in Switzerland, comprising a rotation plan of 20 units and specialist clinics covering all subspecialties of dermatology and allergology, including dermato-oncology, autoimmune skin disease, trichology (hair disease), dermatosurgery, dermatopathology, physical skin therapy (radiotherapy, UV therapy, laser therapy), phlebology and many others.

In addition, three residency positions are available at the allergy unit for board certification in allergology and clinical immunology. These positions count for the full three years that are required in a specialist clinic to obtain the FMH qualification. The quality of the training and teaching receives a very high rating among residents. In 2020, our Allergy Unit also organized both the official oral and written exam of the Swiss Society of Allergy and Immunology SSAI in Zurich for the future board-certified FMH Allergists.



"We are committed to attractive and innovative edcuation and training – in dermatology and allergology."

> Prof. P. Schmid-Grendelmeier Head Allergy Unit and Teaching University Hospital Zurich

#### Dermoscopedia

https://academy.dermoscopedia.org/Main\_Page



With almost 2.5 million page visits in 3 years, Dermoscopedia is the online reference work for skin cancer early diagnosis worldwide.

The platform uses the same technology as Wikipedia and is constantly updated and supplemented by 277 authors and 44 editors.

The key to success here is that the content can be adapted very quickly and without much computer knowledge by any car.

It was conceived, developed by Prof. R. Braun.



Speaker	Institution	Topic
Prof. Dr. med. Beltraminelli Helmut	Dermatologische Klinik, Inselspital Bern, CH	Dermatologie in Afrika - einmal anders
Prof. Dr. med. Bieber Thomas	Bonn, DE	Atopic Dermatitis: Light in the Tunnel**
PD Dr. sc. nat. Bloemberg Guido	National Centre for Enteropathogenic Bacteria and Listeria (NENT); Vetsuisse Faculty, University of Zurich, CH	Tularämie: Klinik, Epidemiologie und Diagnostik
PD Dr. med. Borelli Siegfried	Dermatologisches Ambulatorium, Stadtspital Triemli, Zürich, CH	Workshop: Allergologie in der Dermatologischen Praxis
Borer Lorenz	Novartis Pharma Schweiz AG	Spacial Lecture "Vision"
Dr. med. Brändli Regula	Universitäts-Kinderspital Zürich, CH	Hautpflege bei Kindern: Facts and fiction
Prof. Dr. med. h.c. Bruckner-Tudermann Leena	University Medical Center, Freiburg, DE	2nd Skintegrity Lecture: Skin Fragility – Causes, Mechanisms and Therapeutic Strategies
Prof. Castells Mariana	Bosten, USA	Drug Allergy: just desensitize**
Dr. med. Courvoisier Salomé	Private Dermatologische Praxis, Uster, CH	Fallbesprechungen mit Quiz (ZDFT 2020)
Prof. Cozzio Antonio	Klinik für Dermatologie, Venerologie und Allergologie, Kantonsspital St. Gallen, CH	Amyloidosen
Dr. med. de Viragh Pierre	Private Dermatologische Praxis, Zürich, CH	Androgenetische Alopezie der Frau: Therapie über Minoxidil hinaus
Prof. Dr. sc. nat. Detmar Michael	Institute of Pharmaceutical Sciences Swiss Federal Institute of Technology, ETH Zurich	Klinische Forschung: Haut und Lymphgefässe (What's New)
Dr. med. Dietz Peter	Private Dermatologische Praxis, Ampfing, D	Dermatologie unter den Rahmenbedingungen von Pauschalen und Globalbudget: wie funktioniert das in Deutschland
Prof. Du Toit Georges	Paediatric Allergy at the Evelina London Children's Hospital, London, UK	Peanut Allergy - Prevention and Treatment**
Prof. Dr. med. Elsner Peter	Hautklinik, Universitätsklinikum Jena	Eosinophilie (ZDFT 2020)
Prof. Dr. med. French Lars	Klinik und Poliklinik für Dermatologie und Allergologie, Ludwig Maximilian Universität, Münchenmilians Ludwig Universität, München	Hypersensitivität auf Medikamente (ZDFT 2019)
Dr. med. Gaide Olivier	CHUV Lausanne, CH	Squamous cell carcinoma and actinic keratosis

Speaker	Institution	Topic
Prof. Dr. med. Haase Ingo	Private Dermatologische Praxis, Opfikon, CH	Problemzonen: Entzündliche Krisengebiete der Haut (ZDFT 2019 resp. 2020)
PD Dr. med. Harr Thomas	Service de dermatologie et allergologie, Hôpital Universitaire Genève, CH	
Prof. Dr. med. Hartmann Karin	Klinik für Dermatologie und Allergologie, Unversitätsspital Basel, CH	Whats New in Allergolgy? Gezielte Behandlung der Mastozytose mit neuen Tyrosinkinase-Inhibitoren (ZDFT 2019); Medikamente bei Mastozytose/MCAS – worauf muss man achten ? (ZDFT 2019, bzw. 2020)
Prof. Dr. med. Hassel Jessica	Universitätsklinikum Heidelberg	Immuntherapien und Autoimmunität
Dr. med. Heidemeier Kristine	Dermatologische Klinik Inselspital Bern, CH	Tattoo and Pigment - How to Safely Operate, Gain Knowledge to Maximize Outcome
Prof. Dr. med. Heinzerling Lucie	Hautklinik, Universitätsklinikum Erlangen, D	Ungewöhnliche Nebenwirkungen unter modernen Behandlungsoptionen (ZDFT 2020)
Dr. med. Hess Schmid Monika	Private Dermatologische Praxis, Zürich, CH	Fillertherapie in der Praxis; Update Kurs 6 "Dermatochirurgie" (ZDFT 2019 bzw. 2020)
Prof. Höller Christoph	Universitätsklinik für Dermatologie, Wien, A	
Prof. Dr. med. Hunger Robert	Department of Dermatology, University Hospital Bern, CH	Quiz cases
PD Dr. med. Jalili Ahmed A.	Dermatology & Skin Care Bürgenstock Medical Center, Obbürgen	Systemtherapie / Biologics bei Psoriasis und Hidradenitis für praktizierende Dermatologen
Dr. med. Kägi Martin	Private Dermatologische Praxis, Zürich, CH	Update von Botulinumtoxin in der ästhetischen Dermatologie (ZDFT 2020)
Prof. Dr. med. Kaufmann Roland	Unversitätsklinikum Frankfurt; Klinik für Dermatologie, Venerologie und Allergologie, DE	Hautkrebs: Brauchen wir noch eine Operation?
Prof. Dr. med. Kempf Werner	Histologische Diagnostik Zürich & Dermatologische Klinik, UniversitätsSpital Zürich, CH	What's New - Therapie - Dermatopathologie
Dr. med. Krasovec Rahmann Marguerite	Private Dermatologische Praxis, Schlieren, CH	Entzündliche Dermatosen: Klinische Fälle aus der Praxis (ZDFT 2019 und 2020)
Dr. med. Krischer Joachim	Private Dermatologische Praxis, Plan-Les-Ouates, CH	Lasertherapie: Haar- und Gefässbehandlungen
Prof. Laimer Martin Assoc.	EB-Haus, Universitätsklinikum Salzburg, OE	Epidermolysis bullosa: Wie fühlt sich das Leben eines Schmetterlingskinds?
Prof. Lallas Aimilios	Aristotle University, Thessaloniki, Greece	Demoscopy in general dermatology (Lichen Psoriasis etc.)

Speaker	Institution	Topic
Dr. med. Laubach Hans-Joachim	Service de dermatologie CHUV, CH	Laser Treatments of Scars
Prof. Dr. med. Lautenschlager Stephan	Dermatologisches Ambulatorium, Stadtspital Triemli, Zürich, CH	Genitale HPV-Infektionen: Klinik, Therapie und Prävention
Prof. Lehhloenya Rannakoe	Cape Town, SA	Drug Allergy: the Colored Face
Dr. med. Linsenmeier Claudia	Klinik für Radioonkologie, UHZ	Strahlentherapie heute: wann und wie
Prof. Dr. med. Long Georgina	Conjoint Medical Director, Melanoma Institute Australia, Sydney	New developments in melanoma treatment / A promising biomarker in melanoma research (CCCZ Grand Round)
Prof. Dr. med. Maiwald Mirjana	Private Dermatologische Praxis, Zürich, CH	Drug delivery in der Dermatologie: praktische Möglichkeiten
Prof. Marghoob Ashfaq	Memorial Sloan Ketterin Cancer Center, New York, USA	Benign melanocytic lesions (including congenital nevi, Spitz)
PD Dr. med. Maurer Britta	Klinik für Rheumatologie, Universitätsspital Zürich, CH	Dermatomyositis
Prof. Mavuda Daudi	RDTC Moshi, TZ	Atopic Dermatitis: The African Reality
PD Dr. med. Möhrenschlager Matthias	Dermatologie, Hochgebirgsklinik Davos, CH	Allergologie (Workshop)
Dr. med. Montag Andreas	Hamburg, D	Contact Dermatitis to Bugs & Co
Mutter Bettina	Dynamics Group, Zürich, CH	Wie funktioniert Standespolitik? Aktuelle gesund- heitspolitische Lage und Standespolitik der SGDV (ZDFT 2019 resp. 2020)
Prof. Dr. med. Dr. sc. nat. Navarini Alexander	Dermatologische Klinik, Universitätsspital Basel, CH	What's New: Entzündliche Hautkrankheiten; Digitale Dermatologie (ZDFT 2019 resp. 2020)
Dr. sc. nat. Oeggerli Martin	micronaut, Basel, CH	Into the Deep: Micronautics Visions of Allergens**
Prof. Sabat Robert	Klinik für Dermatologie, Allergie und Venerologie, Charié, Berlin, DE	Pathophysiologie der Entzündung in der Haut: Übersichtsvortrag
PD Dr. med. Scherer Hofmeier Kathrin	Dermatologische Klinik, Universitätsspital Basel, CH	Arzneimittelexantheme – Diagnose und Risikoabschätzung
Dr. med. Schwieger Agnes	Kinderspital Zürich	Therapie entzündlicher Krankheiten bei Kindern*
Prof. Dr. med. Scolyer Richard	Conjoint Medical Director, Melanoma Institute Australia, Sydney	New developments in melanoma treatment / A promising biomarker in melanoma research (CCCZ Grand Round)
Dr. med. Spring Philipp	Dermatologische Praxis, Genf, CH	Aktuelles zum Tarmed*

Speaker	Institution	Topic
Prof. Dr. med. Sunderkötter Cord	Hauttumorzentrum & Hautklinik Universitätsklinikum Halle, DE	Vaskulitis (Jahresthema Bindegewebs- erkrankungen)*
Dr. med. Theiler-Peng Martin	Universitäres Kinderspital Zürich, CH	Praktische Fälle pädiatrische Dermatologie & Whats New in Pädiatrischer Dermatologie (je an ZDFT 2019 und 2020)
Prof. Thomas Luc	Centre Hospitalier Universitaire de Lyon, France	Lesions of the face
PD Dr. med. Vallelian Florence	Klinik und Poliklinik Innere Medizin, Universitätsspital Zürich, CH	Lupus erythematodes
Dr. med. Vasconcelos-Berg Roberta	Klinik für Dermatologie und Allergologie, Universitätsspital Basel, CH	Laser Treatment of Pigmented Skin
PD Dr. med. Weibel Lisa	Universitäres Kinderspital Zürich, CH	Praktische Fälle pädiatrische Dermatologie & Whats New in Pädiatrischer Dermatologie (je an ZDFT 2019 und 2020)
Prof. Dr. med. Zinkernagel Anneliese	Institut für Infektiologie, Universitätsspital Zürich	S. aureus Hautinfektionen: Das ABC der Stahpylokokken (ZDFT 2020)

 <sup>\*</sup> ZDFT: Zürcher Dermatologische Fortbildungstage 2019 resp 2020
 \*\* Allergy Birthday Symposium, June 5, 2019

#### Continuing medical education 2019

Subject/Title	Type of education	Date	Organisation
28. Bruno Bloch–Gedächtnis- vorlesung, Guest Speaker	Dermatology	February 25, 2019	Bruno Bloch Stiftung
Dermatologie in the Spotlight	Dermatology	March 28, 2019	PD Dr. Dr. Emmanuella Guenova
Interdisziplinäre Probleme in der Dermatologie: Neuigkeiten zum Melanom	Dermatology	May 16, 2019	Prof. R. Braun, Dr. J. Mangana
9. Zürcher Dermatologische Fortbildungstage: Hauttumore und Tumorsyndrome	Dermatology	June 26.–28., 2019	Prof. R. Dummer
Allergy Symposium – Beyond Barriers and Borders	Dermatology	July 4, 2019	Prof. P. Schmid-Grendelmeier
2 <sup>nd</sup> SKINTEGRITY Lecture; Skin Fragility – Causes, Mechanisms and Therapeutic Strategies (Prof. Dr. Dr. h.c. Leena Bruckner)	Dermatology	July 11, 2019	Hochschulmedizin Zürich, Universität Zürich, ETH: Prof. S. Werner, Prof. R. Dummer

#### Continuing medical education 2019

Subject/Title	Type of education	Date	Organisation
Grand Round/Comprehensive Cancer Center Zürich/ Hauttumorzentrum UHZ	Dermatology	September 2, 2019	Prof. R. Dummer
Dermatoskopie-Kurs	Dermatology	September 5, 2019	Prof. R. Braun
Dermatologie Grundversorger (together with Institut für Hausarzt- medzin UHZ/UZH & mediX)	Dermatology	October 3, 2019	Prof. T. Kündig, Prof. T. Rosenmann/ Dr. I. Hähnel, Dr. L. Muheim
2nd SGDV Laser-Saturday	Dermatology	November 9, 2019	Dr. L. Imhof
Dermatoloonkologie	Dermatology	December 12, 2019	Prof. R. Dummer, Dr. L. Imhof

#### Continuing medical education 2020

Subject/Title	Type of education	Date	Organisation
VENALPINA IV – Phlebologische Forbildungswoche	Phlebology	January 26–31, 2020	Prof. J. Hafner, as President of the Swis Society for Phleboloy; in Collaboration with the German und Austrian Societie for Phlebology
29. Bruno Bloch–Gedächtnisvor– esung; Guest Speaker. Prof. Dr. Dr. Alexander Navarini, Basle	Dermatology	February 24, 2020	Bruno Bloch Stiftung
Entzündungen und Wundheilung with SKINTEGRITY.CH had to be canncelled due to COVID-19 Situation respectively postponed to March 18, 2021	Dermatology	March 05, 2020	Dr. L. Imhof
10. Zürcher Dermatologische Fortbildungstage: Hauttumore und Fumorsyndrome: Live Streaming including Interdisziplinäre Dermatoonkologie-Fortbildung mit Comprehensive Cancer Center Zürich, planned for May 14; integrated in Session Update Course 2: Dermatooncology	Dermatology	May 14/15 2020	Prof. T. Kündig, Prof. R. Dummer
Dermatologie für Grundversorger. Mythen und Fakten (together with Institut für Hausarztmedzin UHZ/ UZH & mediX); Live Streaming	Dematology	October 1, 2020	Prof. T. Kündig/Dr. M. Wolfensperger, Prof. T. Rosenmann/Dr. I. Hähnel, Dr. L. Muheim
Update Therapien: Hautkrebs und Entzündliche Hautkrankheiten; Live Streaming	Dermatology	December 10.2020	Dr. L. Imhof
SGDV International Dermatocopy Course 2020, digital	Dermatology	from December 17, 2020	Prof. R. Braun

## Research collaborations – Foundations and associates

#### SKINTEGRITY.CH

Chronic skin ulcers, inflammatory skin diseases, and skin cancer are very common pathologies which frequently cause high morbidity or even mortality. The development of innovative diagnostic and therapeutic approaches for these disorders requires a thorough understanding of the underlying pathomechanisms and close collaboration between experts from different disciplines. With this in mind, Zurich-based experts with an interest in skin initiated the interdisciplinary and collaborative research project SKIN-TEGRITY in 2015, which was selected as the University Medicine Zurich "Flagship Project" in 2016. Within a few years the team made important discoveries, and first clinical trials based on the obtained results are ongoing.

After very successful international evaluation, SKINTEGRITY integrated major experts from other Swiss universities and research institutions into the program, and the extended team (SKINTEGRITY.CH; www.hoch-

schulmedizin.ch/skintegrity) received significant funding from the University of Zurich, ETH Zurich, the University of Lausanne and from private foundations.

SKINTEGRITY.CH includes 40 principal investigators (including four from the Department of Dermatology, UHZ) with in-depth expertise in basic skin research, (bio) engineering and clinical dermatology, rheumatology and surgery. The team addresses the following goals:

- Gain a mechanistic understanding of skin repair and disease using a highly interdisciplinary approach
- Develop innovative strategies for the diagnosis and treatment of impaired wound healing and inflammatory and malignant skin diseases
- Provide interdisciplinary training for the next generation of scientists, clinicians and engineers





Hochschulmedizin Zürich

#### Invitation to the 2<sup>nd</sup> SKINTEGRITY Lecture

ETH main building (Hauptgebäude), HG E3

Thursday, 11 July 2019 04:00 pm

"Skin Fragility - Causes, Mechanisms and Therapeutic Strategies"

#### Prof. Dr. h.c. Leena Bruckner-Tuderman

Department of Dermatology University Medical Center Freiburg (DE)

Guests are very welcome!

Hosts: Prof. Dr. Reinhard Dummer, Prof. Dr. Sabine Werner





Prof. Dr. Dr. h.c. Leena Bruckner-Tuderman Department of Dermatology University Medical Center Freiburg (DE)

#### University Research Priority Project (URPP)

www.cancer.uzh.ch

Since the launch of the university research priority project (URPP) for translational cancer research in 2012, the Department of Dermatology has served as a key contributing partner and has greatly benefited from the interaction and financial support provided.

The University of Zurich has committed approximately CHF 15 million over a period of 12 years to finance this URPP, with its primary aim being to bridge the gap between fundamental and clinical cancer research at the university.

The URPP was initially directed by Prof. L. French together with Prof. C. Basler and scientific coordinator Prof. M. van den Broek. Prof. R. Dummer took over the director position from Prof. L. French in 2018.

The funding for URPP translational cancer research clearly underlines the commitment of our university with regard to promoting innovative cancer research based on high-quality science and translating it to the clinic.

URPP translational cancer research is unique in that it unites an exceptional team of internationally recognized scientists and physician scientists in the field of oncology and cancer research, and is committed to bridging the gap in communication and collaboration between physicians and scientists and thereby bring cancer research a step closer to application in the clinic.

URPP translational cancer research focuses on the following four sub-projects:

- 1. Oncogenic signal transduction pathways as targets for personalized tumor therapy
- 2. Interaction between cancer and the human immune
- 3. Tumor biopsy and live tumor cell biobank linked with clinical outcome data
- 4. Translation from bench to bedside

In 2019, the performance of the URPP translational cancer research project was re-evaluated by three external experts commissioned by the university. Based on the positive evaluation, productivity and outlook, the University of Zurich has decided to continue the project and provide an additional CHF 5 million of funding for the next four-year period (2020–2024).

The project facilitates innovation thanks to its dedicated post-doctoral fellows who liaise between clinical and basic labs, and the high-level mentoring provided by the principal investigators in clinical and basic science. As a consequence of the research strategy set out above, an increasing number of interesting publications have been prepared. One example is the collaborative work between the groups led by Prof. L. Sommer (Institute of Anatomy, University of Zurich), Prof. M. Levesque and Prof. R. Dummer (both at the Department of Dermatology, UHZ) focusing on the control of melanoma growth and metastasis through the silencing of distinct tumor suppressors by the epigenetic modifier EZH2 (Zingg D, Debbache J, Peña-Hernández R, Antunes AT, Schaefer SM, Cheng PF, Zimmerli D, Haeusel J, Calçada RR, Tuncer E, Zhang Y, Bossart R, Wong KK, Basler K, Dummer R, Santoro R, Levesque MP, Sommer L.; Cancer Cell. 2018).

**Bruno Bloch Foundation** www.brunoblochstiftung.ch

Dr. C. Lang (Mount Sinai Clinic New York, Prof. E. Guttman-Yassky) and Dr. M. Walther (Melanoma Institute Australia, Sydney) were awarded fellowships in 2019. Dr. L. Krähenbühl (Memorial Sloan Kettering Cancer Center, New York) and Dr. F. Dimitriou (Melanoma Institute Australia, Sydney), received the fellowship in 2020.

In fall 2019, selected guests and donators were invited by the Bruno Bloch Foundation to visit the Department of Dermatology at UHZ. At this event, representatives of the medical staff presented several dermatological areas by providing the audience with specific information about their activities and patient treatments.

The Bruno Bloch Foundation is also the organizer of the Zürcher Dermatologische Fortbildungstage, an important event for the Foundation and Dermatology at UHZ.

In addition, selected members of a jury award give the Bruno Bloch Foundation Poster Prize every year to a dermatologist during the SGDV Annual Meeting.

The Moulagenmuseum of the University of Zurich and University Hospital Zurich is also another institution supported by the Bruno Bloch Foundation.



One of the traditions and highlights at the Bruno Bloch Foundation are the yearly Memorial Lectures, which take place in February with more than 200 faculty members and students at UHZ. In 2020, Prof. Dr. Dr. Alexander Navarini, Chair of the Department of Dermatology at the University of Basel, held the Bruno Bloch Memorial Lecture.

For the first time, in 2013, the Bruno Bloch Foundation organized a charity recital with the exceptional contribution of Anne-Sophie Mutter. The funds collected served to finance research for skin diseases and skin cancer at the Department of Dermatology at UHZ.

Important donators supported this charity evening and made a substantial contribution. Due to its success, the Bruno Bloch Foundation organized other charity evenings in November 2015 with the participation of soprano Edita Gruberova, and the Zurich Chamber Orchestra (ZKO) in May 2017 with the exceptional participation of the Béjart Ballet Lausanne, and in October 2020 with Vilde Frang and the Basel Chamber Orchestra.

A few years ago, the Board of Directors of the Foundation decided to grant two fellowships each year to young dermatologists (residents) from the Department of Dermatology at UHZ for further training abroad.



© Vilde Frang

Thanks to generous donators, the Bruno Bloch Foundation is proud to be able to support several research projects of the Department of Dermatology at UHZ.

**Association for Research on Cancer of the Skin** www.skincancer.ch



Founded in 2004, the Association for Research on Cancer of the Skin (Verein für Hautkrebsforschung; VHKF) aims to coordinate and stimulate skin cancer research in Switzerland by supporting the research of rare and severe forms of skin cancer (e.g. melanoma, cutaneous lymphoma, etc.). The board consists of Prof. R. Dummer (President), Prof. R. Braun, Prof. L. French and C. Frey-Blanc (treasurer), all of whom are based in Zurich, along with Prof. D. Hohl (Vice-President; based in Lausanne), Prof. R. Hunger (Bern), Prof. R. Kaufmann (Frankfurt) and Prof. W. Kempf (Zurich). The current goal is to generate a substantial contribution for clinical and experimental skin cancer research in Zurich and other institutions in Switzerland. Recently, the association created an assistant professorship position at the University of Zurich.

Prof. M. Levesque, an internationally renowned melanoma researcher, will hold the position until he receives a full professorship with tenure track at the university. His research activities involve developing new tools for understanding next-generation sequencing data, and performing functional tests of novel melanoma mutations in the laboratory. In this context, he is using the zebrafish as a model organism in order to improve the understanding of the biology of cancer genes. In his new role, Prof. Levesque also manages the dermato-oncology biobank at UHZ, which provides a diverse collection of live cancer cells to collaborators for experimental research purposes. These are fundamental research activities that form the basis of the understanding of melanoma progression, thereby enabling improvements to be made in melanoma therapy in the future.

In the past year, Prof. Levesque has also established a molecular tumor board for melanoma with the help of the ETH Nexus platform and an innovation grant from UHZ. This board will provide patients who have exhausted other therapy options with new possibilities based on the genomic sequence of their tumors and the availability of new targeted pathway inhibitors in the clinic. In addition, Prof. Levesque has obtained funding from the SKINTEGRITY flagship project at ETH to continue to expand the dermatology biobank and make it more accessible to researchers across Zurich. Finally, collaborations with Roche and

Bristol–Myers Squibb have led to further funding being provided in order to identify novel predictive biomarkers for melanoma immunotherapy treatment. These efforts have resulted in a publication that describes novel markers of circulating macrophages in patients receiving anti–PD1 inhibitors that were shown to have a predictive response (Nature Medicine, 2018). The molecular mechanisms of these observations will be further elucidated in the future.

#### Creation of a new position: skin cancer nurse

Although significant progress has been made in the past few years thanks to the variety of treatment strategies in metastatic melanoma, physicians and patients may have overlapping or divergent expectations regarding the outcome of cancer therapies and the quality of the medical services provided. Despite this, virtually no communication takes place between physicians and patients in this regard.

The role of nursing in systemic therapy should be mentioned here. As of October 2016, a specialist skin cancer nurse position – financed by the Association for Skin Cancer Research (Verein für Hautkrebsforschung) – has been integrated into the treatment processes and is responsible, in particular, for regular contact with patients regarding adverse events (AE), which can occur at any



time during treatment. Many patients find it easier to phone a nurse than a doctor; nurses can therefore serve as an approachable liaison between the patient and the treatment team. For this position, the nurse must be familiar with the specific AE spectrum and the timing of AEs during therapy.

### A mandate to investigate itch in patients with cutaneous lymphomas

Based on the donation of a patient who suffered from itch in the context of Sézary syndrome and unfortunately died from the disease, there is ongoing support of the association for research on cancer of the skin. This support is dedicated to the research of itch in the context of primary cutaneous lymphomas. Dr. Egle Ramelyte and Dr. Desislava Ignatova have taken the task to illustrate the pathophysiology with the goal to identify targetable mediators in this context.

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physiology with the goal to identify targetable mediators in this context.

## Christine Kühne Center for Allergy Research and Education (CK-CARE)

www.ck-care.ch

The Christine Kühne Center for Allergy Research and Education (CK-CARE) is dedicated to the research of allergic diseases with a specific focus on atopic dermatitis. Founded in Davos in 2009, it has led to the creation of a network of research groups in Davos, Bonn, Munich, St. Gallen and the UHZ's allergy unit (see www.ck-care.ch). In the intervening decade, this foundation has become part of a larger initiative with a broad focus on various allergic diseases, with the Allergy Campus Davos serving as the nucleus.

#### Truus and Gerrit van Riemsdijk Foundation

Since many years the Department of Dermatology UZH receives a yearly generous support from the Truss and Gerrit van Riemdijk Foundation. This precious support enables us to persue our ambitious clinical research projects in severe inflammatory skin diseases.



## Collaborations with other dermatology centers

#### Spital Thurgau AG:

dermatological outpatient clinic at Kantonsspital Frauenfeld

A dermatological outpatient clinic at the Kantonsspital Frauenfeld (cantonal hospital; KSF) has been in operation since 2011, and works in close collaboration with the UHZ Department of Dermatology. The clinic is run by senior dermatologists from the Department of Dermatology who divide their hours between UHZ and KSF. The team of physicians receives support from a senior dermatology resident from UHZ who is sent to Frauenfeld for a sixmonth rotation. Dr. S. Nobbe serves as head of the clinic. Other senior dermatologists who have held positions at the clinic include Dr. A. Frauchiger, (since September 2018), Dr. M. Kunz (September 2019–December 2019), Dr. C. Lang (since January 2020) and Dr. A. Cicha (since October 2020).



### **Zuger Kantonsspital, Baar:** www.zgks.ch

In close connection with the Department of Dermatology at UHZ, Dr. E. Hohenstein Jaccard, runs a two-day dermatology service at Zuger Kantonsspital for referred outpatient and internal consultancies. Prof. P. Schmid-

Grendelmeier, oversees this service on the part of UHZ and, together with Dr. S. Micaletto, serves as an external consultant for allergic diseases at Zuger Kantonsspital.

### **Hochgebirgsklinik Davos** www.hochgebirgsklinik.ch

UHZ works very closely with Hochgebirgsklinik Davos and CK-CARE, both of which are members of the Health and Life Science Campus in Davos. The Kühne Foundation was responsible for establishing a Medical Campus and offers new research and educational facilities in various areas including dermatology and allergy. There are special programs for patients with allergic and inflammatory skin diseases and food intolerances (especially histamine intolerance). Special programs involving a high level of patient care paired with specific educational programs and nutritional and psychosomatic support result in a unique hospitalization experience in a special setting with fully renovated private rooms. This service is led by PD Dr. M. Möhrenschlager, and Prof. M.-C. Brüggen, MD, PhD, with a professorship founded by CK-CARE shared between the Medical Campus Davos and the Department of Dermatology UHZ.



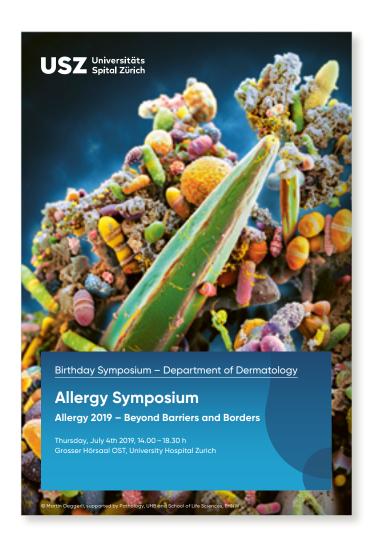
## 13 Congresses/ scientific meetings

#### Allergy symposium "Beyond barriers and borders"

(July 4, 2019, Organisation: Prof. P. Schmid-Grendelmeier)

On July 4, 2019 an international Allergy Symposium was organized to reflect the wide range of allergic diseases and related research on the occasion of the 60th birthday of the organizer. The meeting was held in the fully occupied Great Auditorium Ost and offered a highly attractive program, presented by a faculty from very renowned local, European and overseas speakers. The latest insights in atopic dermatitis, food allergy and drug hypersensitivity were presented by some of the leading experts in the area, such as Prof. T. Bieber (Germany), Prof. M. Castells (USA), Prof. G. Du Toit (UK), Prof. R. Lehloenya (South Africa) and Prof. D. Mavura (Tanzania). Co-chaired by Prof. B.

Ballmer-Weber and PD Dr. T. Harr, an exciting blend between state-of-the-art research, interdisciplinary cooperations at the UZH and signs of friendship over the years were presented, covering the whole range from molecular views to global aspects. The final highlight of the event was the presentation by Dr. M. Oeggerli, who allowed a dive into the fine art of electron microscopy of various allergens (www.micronaut.ch). Enriched by an original African buffet (www.african-queen.ch), the team enjoyed the presence of and exchange with the large community of specialists, referring physicians and former trainees of the Allergy unit.



#### **Program**

#### Part I: Flying High

Chairs: Prof. Barbara Ballmer-Weber\*, KSSG, Prof. Peter Schmid-Grendelmeier\*

#### 14.00 h Welcome Address

Prof. Gabriela Senti. Director Research USZ Prof. Arthur Helbling, President SCC, SSAI Dr. Carlo Mainetti, President SSDV

#### 14.15 h Peanut Allergy: Prevention and Treatment

Prof. George Du Toit, London/UK Host: Nadja Galliker, MD\*

#### 14.40 h Drug Allergy: the Colored Face

Prof. Rannakoe Lehloenya, Cape Town,SA

Host: Mirjam Nägeli, MD\*

#### 15.05 h Drug Allergy: just desensitize!

Prof. Mariana Castells, Boston / USA Host: Sara Micaletto, MD\*

#### 15.30 h Allergy Bridging to other USZ Disciplines: a Potpourri of Pearls (3 minutes each)

PD Stephan Balabanov: Mastocytosis / Hematology Prof. Hans-Werner Ducha: Eos & Asthma / Pneumology HGK Davos Prof. Holger Dressel: Occupational Allergies Daniel Gianlelli: Food Intolerance / Nutrition HGK Davos

Christian Greis: Digital tools / USZ Karin Grando: Allied Health and Pat Education Prof. Oliver Senn: Primary Care / IPCZ PD Michael Soyka: Nasal Mucus / ENT Urs Steiner, MD: HAE / Immunology

#### Coffee Break

\* Department of Dermatology University Hospital Zurich

#### **Program**

#### Part II: Looking Deep

Chairs: Prof. Thomas Harr, Geneva University Hospitals, Prof. Peter Schmid-Grendelmeier\*

#### **Atopic Dermatitis:**

Light in the Tunnel – Prof. Thomas Bieber, Bonn/G The African Reality – Prof. Daudi Mavuda, RDTC Moshi / TZ Vaccine Strategies for AD – Prof. Thomas Kündig\* Host: Charlotte Brüggen, MD, PhD\*

#### 17.40 h Contact Dermatitis to Bugs & Co

Andreas Montag, MD, Hamburg/G Host: Claudia Lang, MD\*

#### Into the Deep: Micronautic Visions of Allergens

Martin Oeggerli, Dr. PhD, Basel (www.micronaut.ch)

Host: Julia Genser, MD\*

#### 18.30 h Apéro Riche

Served by African Queen, Zurich

\* Department of Dermatology University Hospital Zurich

Acknowledgement for great support and excellent collaboration to Christine Kühne – Center for Allergy Research and Education (www.ck-care.ch) aha: Swiss Allergy Centre (www.aha.ch) European Academy for Allergy and Clinical Immunology EAACI (www.eaaci.org) Swiss Society for Allergy and Immunology SSAI (www.ssai.ch)

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#### Contact

Abionic SA

University Hospital Zurich Department of Dermatology Allergiestation USZ michaela.kocjancic@usz.ch +41 44 255 30 79

#### Venue

University Hospital Zurich Grosser Hörsaal OST Gloriastrasse 29 8091 Zurich Switzerland

Credits SGDV/SSDV 4 SGAI 4

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05.19



#### **Grand Round:**

New developments in melanoma treatment / A promising biomarker in melanoma research

(September 2, 2019:

Comprehensive Cancer Center Zürich Organisation: Prof. Reinhard Dummer)

Mit 2 «Top» Referenten aus Australien:

- Prof. Dr. med. Giorgina Long
- Prof. Dr. med. Richard Scolyer, Conjoint Medical Directors, Melanoma Institute Sydney



Comprehensive Cancer Center Zürich, Dermatologische Klinik, Klinik für Medizinische Onkologie und Hämatologie, Klinik für Radio-Onkologie

Montag, 02. September 2019, 12.00 - 13.00 Uhr

Sandwiches ab 11.30 Uhr

Grosser Hörsaal OST HOER B 10, Universitätsspital Zürich, 8091 Zürich

Onkologie-Seminare

### **CCCZ Grand Round: New** developments in melanoma treatment / A promising biomarker in melanoma research



Prof. Dr. med. Georgina Long and Prof. Dr. med. Richard Scolyer Conjoint Medical Directors, Melanoma Institute Australia, Sydney

Es ist keine Anmeldung notwendig. Die Teilnahme ist kostenlos. Credits: 1 SGMO-Credit

Mit freundlicher Unterstützung von: Amgen, AstraZeneca AG, Bristol-Myers Squibb, Daiichi Sankyo (Schweiz) AG, Eisai, Eli Lilly (Suisse) SA, Gilead Sciences Switzerland Sarl, IPSEN PHARMA GmbH, Janssen-Cilag AG, Merck (Schweiz) AG, MSD Merck & Dohme AG, Novartis, Pfizer, PharmaMar, Pierre Fabre Pharma AG, Roche, Sanofi-Aventis AG, Servier (Suisse) S.A., Takeda Pharma AG, Teva Pharma AG

Organisation: Comprehensive Cancer Center Zürich, UniversitätsSpital Zürich, Prof. Dr. Rolf Stahel, Leiter Comprehensive Cancer Center Zürich, Prof. Dr. med. Reinhard Dummer, Leiter Hauttumorzentrum Rämistrasse 100, 8091 Zürich







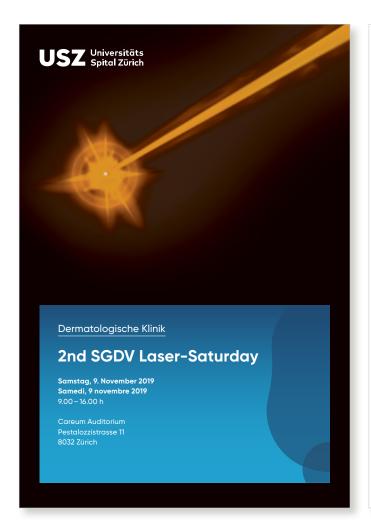


#### 2<sup>nd</sup> SGDV Laser-Saturday

(November 9, 2019, Organisation: Dr. L. Imhof, Prof. R. Dummer)

On November 9, 2019, the 2nd SGDV Laser Saturday took place in Zurich in the Auditorium Careum under the chair of Dr. Laurence Imhof and Prof. Reinhard Dummer. The aim of the course was to provide the latest knowledge on laser technology and application for a patient care of the

highest quality. The 80 participants, mainly dermatologists but also plastic surgeons rated the "boutiquestyle" course as excellent and greatly appreciated the personal informal exchanges with experts from all over Switzerland.



#### **Program** 09.00 h Welcome Laurence Imhof, Dr., Dermatologische Klinik USZ 09.10 h Basic Physics of Lasers and EBD Reinhard Dummer, Prof. Dr., Dermatologische Klinik USZ 09.40 h Tattoo and Piament -How to Safely Operate, Gain Knowledge to Maximize Outcome Kristine Heidemeier, Dr., Dermatologische Klinik Inselspital 10.10 h Hair removal / Hair growth -Treatment and device pros / cons Joachim Krischer, Dr., Laserdermato Plan-les-Ouates 10.40 h Coffee Break 11.00 h Current Update on Laser Treatment of Vascular Lesions Laurence Imhof, Dr., Dermatologische Klinik USZ 11.30 h Laser Smoke - Risks and Prevention Measures Florentia Dimitiou, Dr., Dermatologische Klinik USZ 12.00 h Q&A 12.15 h Lunch Break 13.00 h Lasers and EBD for Skin Rejuvenation Hans-Joachim Laubach, Dr., Service de dermatologie HUG 13.30 h Laser Treatment of Scars Jean-Luc Lévy, Dr., Service de dermatologie CHUV 14.00 h Laser Treatment of Pigmented Skin Roberta Vasconcelos-Berg, Dr., Universitätsspital Basel 14.30 h Laser Safety - Beyond Lenses and Room Signs Joachim Krischer, Dr., Laserdermato Plan-les-Ouates 15.00 h Coffee Break 15.20 h The Pitfalls of Using Laser Reinhard Dummer, Prof. Dr., Laurence Imhof, Dr. 15.50 h Conclusions and Q&A

## "Dermatology for General Practitioners": Annual Symposia 2019/2020

(Chair: Prof. T. Kündig, Dr. M. Wolfensperger, PD Dr. F. Anzengruber)

We have regularly organized symposia on dermatology especially dedicated to General practitioners (member of SGAIM – Society for General and Internal Medicine) for five years. In collaboration with the Institut für Hausarztmedizin UHZ/Unviersity of Zurich and mediX, this is one of the most important HMO in Switzerland, chaired by Dr. I. Hähnel, and Dr. Leander Muheim. The aim is to cover a broad need of the General Practitioners for training in

dermatology – as around 20% of their consultations are currently related to a skin disorder or allergic disease. They took place on October 3, 2019 and on October 1 2020 – as a digital/live-stream meeting. We counted over 120 participants, in 2020 – as a digital meeting, even as many as 200. This success motivates us to organize it in 2021 again in a digital format in order to cover an even broader geographic area.

### IX VENAPLPINA – Phlebologische Fortbildungswoche, January 23–26, 2020, Seefeld/A

(Chaired by Prof. J. Hafner, President of the Swiss Society for Phlebology, Prof. W. Salmhofer, Graz and PD Dr. D. Mühlberger, Bochum)

This highly appreciated meeting in Phlebology and Wound Healing takes place every 3 years and is attended by young physicians who want to become proficient in phlebology, as well as by established phlebologists coming from dermatology, angiology or vascular surgery. They appreciate this traditional six-day congress as comprehensive continuous medical education.

All presentations and courses of the IX. Edition (2020) were remarkable, and the participants' feedback were accordingly enthusiastic.



Prof. E. Rabe (Präsident European College if Phlebology, Past President Union Internationale de Phlebologie), Speech at closure of the IX VENALPINA Phlebologische Fortbildungswoche, January 2020: «What's New in Phlebology?»

#### 9th and 10th Zürcher Dermatologische Fortbildungstage 2020 – live streaming for the first time in 2020

The Zürcher Dermatologische Fortbildungstage (ZDFT) were launched in 2011 and immediately proved highly successful as reflected by the feedback and number of participants – mainly practicing dermatologists: we counted over 240 physicians. This confirms the establishment of this event as one of the most important congresses on dermatology in the German-speaking region of Switzerland.

The three (or two)-day intensive continuing medical education event offers a mixture of plenary lectures, hands-on workshops at the Department of Dermatology, and a half-day "What's new" event. In addition, each year the congress is dedicated to a so-called "Jahresthema" (annual topic) with international speakers. In 2019, the topic was "Deposition dermatoses", and in 2020



"Connective tissue diseases of the skin". Both subjects were highly appreciated for their interesting and enriching approach, also to practitioners in dermatology. In 2020, the organizing committee had to face major challenges due to COVID-19: Within 8 weeks, the program, technical aspects, speaker coordination and sponsoring had to be reorganized to switch to a digital format. Fortunately, with a great deal of efforts from all parties involved, the internal team, chairs and speakers as well as sponsors, the ZDFT 2020 was a great success. Around 280 dermatologists took part, and about 50 speakers contributed a very fruitful, lively exchange.



#### 2. Annual Assembly of the Swiss Society for Dermatology and Venereology

(Sept 17/18, 2020, Organization: Prof. T. Kündig and Team of the Senior Associate Physicians of the Department of Dermatology UHZ)

Every five years it is the turn of the Department of Dermatology of the UHZ to organize the annual meeting of the SSDV. This one also took place – probably and hopefully for the only time – as a live stream. The motto in 2020 was: "Top medicine in practice".

The organization team was able to organize numerous international top-opinion leaders for the digital meeting. Prof. Emma Guttman/NY, Prof. Kristian Reich/ Hamburg, Prof. Ulrich Mrowitz/Kiel as well as Prof. Paolo Dotto/Lausanne and Prof. Lukas Sommer/Zurich from Switzerland spoke in the keynote lectures session and symposia. We are especially proud of the Parliamentarians' Roundtable: 4 members of the CH Parliament highlighted current and critical health policy issues – chaired by Prof. Jürg Hafner, Member of the SSDV. In total, more than dermatologists attended the 2-day online congress, which can be considered a great success. The generous support and professional organization of the PCO Convention Team AG, Management: Christine Della Chiara) enabled an all-around successful event under the highly challenging COVID-19 conditions.







## 14 Public relations

#### Events for the public and patients

We regularly organize evening events on topics such as psoriasis, neurodermatitis, rosacea, acne and acne inversa, and provide information on skin cancer during National Swiss Cancer Day in May. Even in 2020, 3 events took place (Skin Cancer, 13.5.2020, Psoriasis, 27.9.2020, Acne Inversa, 10.10.2020) – in the form of a live-stream event. These events were also highly popular; we counted 150–200 participants per event.



#### Watch on Youtube:

https://youtu.be/IS2tOdrsN1A

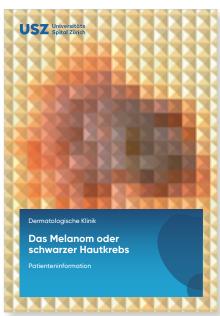
#### Patient information brochures for specific illnesses

We edit our own patient information brochures on the most common skin diseases, such as skin cancer, neuro-dermatitis, psoriasis, hand eczema, acne inversa, laser medicine and others, with the intention of providing balanced, objective information to our patients. These are free of charge, are available from our website and are ordered regularly by practicing dermatologists for distribution to patients.

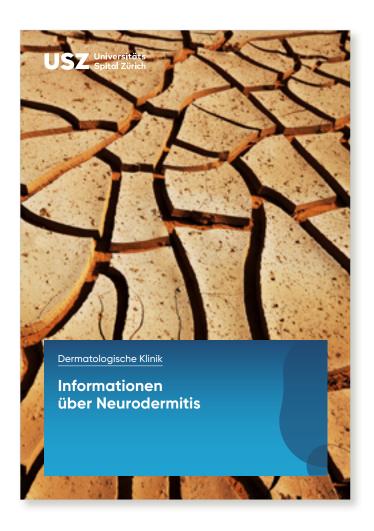












#### Internet/intranet/social media/media relations

We update our website (www.dermatologie.usz.ch) almost daily to ensure topical and vivid content; in 2020 we prepared the completely revised web page – it went live on January 12, 2021. In 2020, helpful and immediate information was provided during the COVID-19 crisis in 2020 for patients with allergies and their physicians.

Our team of senior consultants is at the service of the media (standard and specialist press) for targeted subjects/interviews on a regular basis; one of the focus subjects in 2020 was COVID-19 crisis at our laboratory and our research projects for COVID-19 vaccination.

## 15 Museum of Wax Moulages

Head: Dr. M. Geiges



In the Museums' Night 2019, in which we answered previously collected questions on the topic of "syphilis" with a small exhibition, over 900 people once again visited the Museum of Wax Moulages. Over the whole year we counted 4,500 visitors. Several short reports appeared in the media and moulages were lent out for external exhibitions. At the annual congress of the International Society for Evolution, Medicine & Public Health (ISEMPH) in Zurich, wax moulages on smallpox and measles illustrated the topic of viral diseases and vaccination — shortly before this topic dominated the world a year later.

In summer 2019, the Sinergia–SNF research project "An interdisciplinary model to explain never–ending infectious diseases. The case of syphilis." of the University of Geneva, in collaboration with the University of Strasbourg, the Museum of Wax Moulages Zurich and the Institute of Evolutionary Medicine of UZH, was approved but could only start with a delay with digital meetings and delays due to the pandemic.

Also for the Museum of Wax Moulages, the year 2020 was dominated by the corona pandemic. The Museums' Night had to be cancelled. Twice the museum was closed for several weeks and in between, with a strict hygiene plan, up to a maximum of 12 people could visit the museum at the same time. Seminars had to be moved to the digital space (Zoom) with the help of lectures by the cura-

tor (CAS course Medlaw, PhD seminars). The introductory course "Dermatology" in medical studies was distributed among 43 small groups, which were given access to the otherwise closed building for self-study accompanied by detailed documentation. The focus in 2020 was on the professional processing of the museum's archives and on conservation and restoration. This work was actively supported by our freelancer Johanna Stierlin, who completed an internship at the Moulagenmuseum as part of the Bachelor's Degree in Restoration and Conservation of the University of Bern.



## Promotions, grants honors and awards

#### **Promotions**

#### **Assistant Professor**

- Prof. Dr. Dr. Marie-Charlotte Brüggen

#### Venia legendi

- PD Dr. Florian Anzengruber (2021)
- PD Dr. Marjam Barysch-Bonderer (2019)
- PD Dr. Julia-Tatjana Maul (2021)

#### **Appointment**

PD Dr. Dr. Emmanuella Guenova: Appointment to a professorship for Dermatology to the Centre Hospitalier Universitaire Vaudois (CHUV) / Université de Lausanne, 2019

#### Attending Physicians with extended responsibility

- Dr. Isabel Kolm-Djamei (2019)

#### **Attending Physicians**

- Dr. Michael Kunz (2019)
- Dr. Claudia Lang (2020)
- PD Dr. Julia-Tatjana Maul (2019)
- Dr. Dr. Barbara Meier-Schiesser (2020)
- Dr. Olivia Messerli-Odermatt (2020)

#### Attending Physicians i.V

- Dr. Eugen Bersuch
- Dr. Andrea Binkert
- Dr. Susann Hasler
- Dr. Alexandra Matter (July 2020)
- Dr. David Muggli
- Dr. Thierry Nordmann (July 2020)
- Dr. Egle Ramelyte and Specialist for Pharmaceutical Medicine FMH (Jan 2020)

#### FMH board exam (specialist examinations)

#### FMH Board Exam, Dermatology and Venereology

2019: Dr. Chantal Bachmann, Dr. Caroline Buset,

Dr. Christian Greis, Dr. Omar Hassan Ali,

Dr. Lukas Krähenbühl, Dr. Alexandra Matter,

Dr. Dr. Barbara Meier-Schiesser,

Dr. Olivia Messerli-Odermatt, Mosab Tariq I Mohanna,

Dr. Matthias Walther

**2020:** Dr. Thomas Coppetti, Dr. Valerio Del Prete,

Dr. Jil Dreier, Dr. Cornelia Deubelbeiss, Dr. Joana Lanz,

Dr. Deborah Leuthard, Dr. Larissa Meier,

Dr. Thierry Nordmann, Dr. Ellen Scherrer

FMH Board Exam, Allergology and Clinical Immunology

2020: Dr. Nadia Galliker, Dr. Sara Micaletto,

Dr. Carla Murer



"Our priority in SAKK is to further save lives from melanoma by promoting high-quality research and further developing and improving cancer treatments."

> Dr. med. Joanna Mangana Attending physician, Dermatooncoloy Head of Immunotherapy Clinic University Hospital Zurich

#### Honoraries, Awards and Grants (Selection)

- PD Dr. Marjam Barysch-Bonderer: Certification as Mohs Surgeon by The European Society of Micrographic Surgery (ESMS) (autumn 2019)
- Prof. Dr. Dr. Marie-Charlotte Brüggen & Claudia Lang: Grant by the Innovation Pool of the University Hospital of Zurich, Project: Neue in vitro-Diagnostik für Metallallergene (summer 2020)
- Prof. Dr. Reinhard Dummer: Ranking No 4 (Career-Long 1996–2019) in «Top Authors in Dermatology: Comparison of standardized database citations indicators», Journal of the American Academy of Dermatology» 2019
- Dr. Christian Greis:
  - InnoCheck Grant 2020 by Innosuisse Swiss Innovation Agency (former KTI)
  - Funding by UHZ Health Innovation Hub for "derm2go"
- Dr. Carole Guillet: Scholarship EACCI (European Association for Allergology and Immunology): Research Stay (1 year) at the Charité, Berlin, under the Lead of Prof. Frank Siebenhaar/Prof. Marcus Maurer: Project: Characterizing the function an signal transduction pathways in Kit-D816V+ mast cells and potential implications in mast cell activation in systemic mastocytosis (Annual Meeting, September 2020)
- Dr. Carole Guillot: SSAI (Swiss Society for Allergology and Immunology): Brunello Wüthrich Poster Prize (1st author): "Bugs are everywhere – a case of orange juice anaphylaxis" (Annual Meeting, October 2019)
- Catherine Frey-Blanc, Project Leader/Quality
   Management: Certificate "Risikomanagement"
   by SAQ Qualicon (August 2020)
- Prof. Jürg Hafner: Election to President of the Swiss Society of Phlebology (SGP), September 2019
- Dr. Laurence Imhof: Election to President of the Executive Board of the Laser Commission FMH
- Dr. Michael Kunz: Fellow-Ship "Mohs micrographic Surgery in Dermato-Oncology" completed and as a consequence: Nomination as certified Mohs Surgeon and Member of the American College of Mohs Surgery (ACMS) and certified Member of the European Society for Mohs Surgery (ESMS)

- Dr. Joanna Mangana: Election to President Swiss Melanom Group of the SAKK (Swiss Association for Cancer Research) for the Swiss Melanoma Group (May 2020)
- PD Dr. Julia-Tatjana Maul:
  - Scholarship by the Bruno Bloch Foundation: 20%
     Research Activity for the year 2021 (summer 2020)
  - Scholarship of the International Psoriasis Council (IPC) / Yellows Program Steering Committee (2019)
     2 months fellowship in Latin America (Chile, Brazil)
  - Scholarship "Filling the Gap" Project: received grant for 2020 (October 2019)
  - Election as co-author member of the Guideline Commission "Psoriasis" by European Society of Dermatology (EDF) (August 2020)
  - Nomination as Global Medical Coordinator of the Global Psoriasis Atlas (GPA, chaired by Prof. Christopher Griffiths, Manchester/UK) (summer 2020)
- Dr. Dr. Barbara Meier-Schiesser: Scholarship "Filling the Gap" Project: received grant for 2020 (October 2019)
- PD Dr. Steve Pascolo:
  - Scholarship by the Swiss National Funds of the so-called NRP 78 «Covid-19» for two years (amount for whole project: CHF 271 750.–); aim of the project: implementation, testing and optimizing of an mRNA-vaccination against SARS-CoV-2
  - EU Grant» NEWmRNA» together with partners from Leuven (B), Paris, Berlin, Luxembourg, Konstanz and Basle in order to optimize mRNA therapies (grant of about 3 millions €)
- Dr. Egle Ramelyte: Swiss Skin Cancer Award 2020,
   Project "Oncolytic virotherapy mediated anti-tumor response through a single cell's perspective"
- Prof. Peter Schmid-Grendelmeier
  - Nomination as Honorary President of the Swiss Society Allergology and Immunology (Annual Assembly, October 2019)
  - Nomination as Honorary Member of the Tanzanian Society for Dermatology for its long-term merits at the 25. CME-Congress of the RDTC in Moshi (January 2020)
- Dr. Veronica Schmid (chaired by Prof. Dr. Dr. Marie-Charlotte Brüggen, Hochgebirgsklinik Davos): Research Prize of the Bruno Bloch Foundation, Project "Serological immune signature changes in SJS/TEN patients during IVIG treatment" (SSDV Annual Meeting 2020)

# Partners, sponsors, collaboration with industry, fundraising

Our ongoing efforts in medical education, public relations, marketing and networking with private practitioners are possible only thanks to external funding. We collaborate with partners in industry on post-graduate education, which gives both private practitioners and industry a platform for communication and exchange. Opportunities are also provided by our two charitable foundations, the Bruno Bloch Foundation and the Association for Skin Cancer Research (Verein für Hautkrebsforschung).

We wish to acknowledge the support of our industrial partners here. Their collaboration helps us to guarantee the quality and design of our post-graduate teaching programs. The UHZ Department of Dermatology is grateful to the sponsors and donors below for their generous support.



#### With special acknowledgement to our partners

#### Schwerpunkt "Hautkrebs"

- Amgen Switzerland AG
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- La Roche-Posay Schweiz AG
- Galderma SA
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- Novartis Pharma Schweiz AG
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- Pierre Fabre Pharma SA
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#### Schwerpunkt "Entzündliche Hautkrankheiten"

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- Sunpharma GmbH
- Takeda AG
- Therakos (UK) Inc.
- Ultrasun AG
- Zur Rose (Suisse) SA

## Publications in 2019 and 2020

#### **Original Papers 2019**

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#### **Book Chapters 2020**

Barysch MJ, Läuchli S. Oxygen Therapy in Wounds. Local Wound Care for Dermatologists Springer 2020 (Afsaneh Alavi Howard I. Maibach Editors)

Läuchli S, Streit M, Blazek C (2020), Leg ulcers, In: European Handbook of Dermatological Treatments. Katsambas A, Lotti T (eds.)

# 19 Key-Figures Department of Dermatology 2020

#### **Financial Data**



Number of Leaves Inpatient Clinic 1650

Biopsies in Dermatopathology
32133

# Research

Cumulative Impact Factor Publications

1005

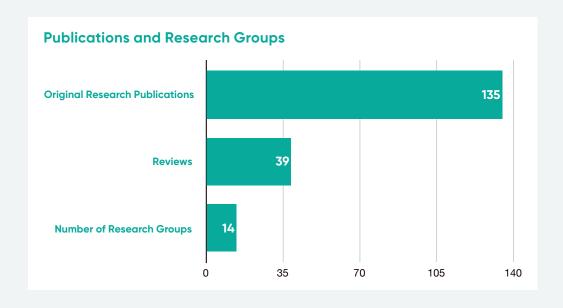
Percentage of Clinical Trials within University Hospital Zurich

over 20%

Number of Clinical Trials/Protocols:

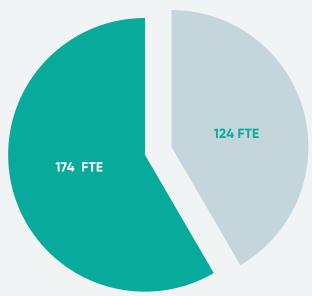
More than 40 new protocols in 2020 mainly in melanoma and inflammatory skin diseases

SDNTT (Swiss Dermatology Networt
Targeted Therapies):
50% (more than 2000) patients from Zurich/
Department of Dermatology



# Staff





# **Teaching**

Congresses/Symposia	
International	<ul><li>IX VENALPINA 2020</li><li>International Dermatoscopy Course 2020</li></ul>
National	<ul><li>ZDFT 2019/2020</li><li>SGDV 102. Annual Meeting 2020</li></ul>
Regional	<ul> <li>6 Grosse Semesterfortbildungen incl. Interdisciplinary Dermatooncology Symposium</li> </ul>

Largest Swiss
Weiterbildungstätte
Dermatology & Venereology\*
and Allergology & Immunology
FMH in Switzerland

\* 30% of
evaluations
(16 of 68)

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