



# Annual Report of the Research Fund



SWISS LUNG ASSOCIATION



**Ladies and Gentlemen,  
Dear Colleagues,**

The Lung Association Research Fund is a success story! We have supported some 30 research projects since its inception. These research projects will help make life better in future for people with lung diseases. The year 2017 will remain particularly memorable for us in that it was the first time we were able to award a prize worth CHF 10 000 for the best publication by a young researcher in the field of lung and respiratory research. On that note, I hope you enjoy reading our Annual Report.

*Rolf A. Streuli*

*Prof. Dr. med. Rolf A. Streuli, MACP, FRCP  
Director of the Swiss Lung Association*



# Into the future with new therapies

Diseases of the respiratory organs are on the rise, and are already the fourth most common cause of death in Switzerland. The Lung Association works to reduce the number of new cases of lung disease through education and to improve the lives of people suffering from respiratory and lung diseases.

Aware that such a goal can be achieved only through increased research in the field of respiratory diseases, the Lung Association established the Research Fund in conjunction with the SGP (Swiss Society of Pneumology) and the SGPP

(Swiss Society of Pediatric Pneumology) in 2012. This fund is financed by donations and contributions from the cantonal Lung Associations. Each year since 2013, research grants of some CHF 625 000 have been made to innovative projects. The Lung Association is proud to support promising projects in this way.

2017 marked a special milestone in the still young history of the Research Fund: for the first time, a young researcher received a prize of CHF 10 000 for the best publication in the field of lung and the respiratory tract.

# Development of the Research Fund

Since the founding of the Research Fund, 30 or so researchers have applied for grants each year. Following thorough examination by the Research Committee, only around six projects have ultimately received funding. The projects will run for one to four years. The total annual

sum of project applications averages CHF 3.5 million and is growing. The annual research grants from the fund amount to CHF 625 000. Additional sums are allotted from earmarked grants acquired from external foundations.

## Number of projects



## Project funds





# Projects completed in 2017

## > Increased Sleep Apnoea in Ehlers-Danlos Syndrome

2015-02, Prof. Dr. med. Malcolm Kohler, University of Zurich, CHF 101 385

## > Lung Cancer Screening in Switzerland – Costs and Consequences

2015-03, Prof. Dr. Milo Puhan, University of Zurich, CHF 139 845

## > Glycosaminoglycans in COPD

2015-18, Prof. Dr. med. Daiana Stolz, , University Hospital Basel, CHF 103 126

### In the spotlight:

**People with Ehlers-Danlos syndrome often suffer from sleep apnoea. This insight explains their frequent daytime fatigue.**

The term «Ehlers-Danlos Syndrome» (EDS) describes a congenital connective-tissue disorder that is typically characterised by hyperextensibility of the skin and other tissue. Many EDS sufferers complain of tiredness during the day, the cause of which was previously unknown.

A group of researchers headed up by Malcolm Kohler suspects that the tiredness is caused by sleep apnoea. This is when a person's breathing ceases periodically

during the night, preventing them from getting restful sleep.

The researchers have now succeeded in showing that patients with EDS often suffer from sleep apnoea, which explains their tiredness during the day.

Thanks to the study's findings, EDS patients can be given targeted treatment, which significantly improves their quality of life.

# Projects supported in 2017

## Projects funded by the Research Fund in 2017

### > Airway remodelling as a key to the treatment of asthma

2017-02, Prof. Michael Roth, University Hospital Basel, CHF 105 000

### > Does early contact with nicotine cause chronic lung diseases?

2017-03, Prof. Constance Barazzzone-Argiroffo, Geneva University Hospital, CHF 148 000

### > New strategy for the treatment of allergic asthma

2017-07, Dr. Alexander Eggel, University of Bern, CHF 130 000

### > Use of biomarkers in the management of asthma

2017-14, Prof. Dr. med. Urs Frey, University Children's Hospital Basel, CHF 117 000

### > New exercise programme for COPD patients – daily and at home

2017-19, Dr. Anja Frei, University of Zurich, CHF 125 000



### **In the spotlight:**

#### **Does early contact with nicotine cause chronic lung diseases?**

The human lung develops before birth and matures after birth. Throughout the entire development and growth phase, the lungs are extremely sensitive to noxious substances such as tobacco smoke.

nicotine increases the risk of chronic lung diseases (e.g. COPD) later in life. The researchers are focusing on the effect that nicotine has on the stem cells that normally repair lung defects.

A group of researchers led by Constance Barazzone-Argiroffo wants to find out whether early exposure of the lungs to

#### **New strategy for the treatment of allergic asthma**

Allergic bronchial asthma, which is already widespread in Switzerland, especially in children, is on the rise.

Alexander Eggel and his team plan to use a mouse model to test substances that prevent the antibody IgE (immunoglobulin E) from working. IgE is a key molecule in triggering asthma attacks. If the action

of IgE is blocked, there is no inflammatory reaction in the respiratory tract of sufferers. No inflammation – no asthma attack! Up to now, allergic bronchial asthma has been treated fairly unspecifically with anti-inflammatory cortisone. High time, then, to give some thought to targeted therapies.

# The Lung Association Research Award



*«To receive the generous award of the Swiss Lung Association for the best publication by a young researcher was not only an honour and a motivation to produce further good research in the field of pneumology, it also provided excellent support for my research visit in London. Thank you very much!»*

*Dr. Esther Irene Schwarz*

*Dr. med. Thomas Schmid, Dr. Esther Irene Schwarz,  
Prof. Dr. med. John-David Aubert (l. to r.)*

Motivated by the desire to support more researchers who are in the early stages of their career, the Lung Association presented the award for the best publication by a young researcher in the field of respiratory research and lung health for the first time at the SGP Congress in 2017. This award recognises outstanding

research projects that have already been completed. In 2017, the award went to Dr. Esther Irene Schwarz of Zurich University Hospital for her publication «Effects of CPAP therapy withdrawal on exhaled breath pattern in obstructive sleep apnoea», which was published in «Thorax».



## Behind the scenes



For almost two years now, it has been my privilege to look after the interests of the Swiss Lung Association Research Fund – an exciting task involving organisational, planning and creative work in liaison with committees, researchers and internal partners. The Research Fund is constantly evolving.

This is also demonstrated by the Lung Association Award, presented for the first time in 2017, which directly supports the young research community. I am pleased to be able to contribute to strengthening lung research in Switzerland through my work.

Jenny Herzog  
Head of Research Secretariat

### Thank you very much!

We would like to thank the individuals, institutions and cantonal Lung Associations who have generously supported the Swiss Lung Association Research Fund with their donations.

We would particularly like to thank the following institutions, which specifically promote or support individual projects:

- > **Uniscientia Foundation**
- > **Eugen & Elisabeth Schellenberg Foundation**
- > **Bank Vontobel Charitable Foundation**
- > **Bank for International Settlements (BIS)**

# Annual financial statement

Payments	Totals 2017 in CHF	Budget 2018 in CHF
Annually recurring payments	737 000	755 800
Overheads	112 000	130 800
Secretariat	81 000	85 800
Honorary committee members	22 000	25 000
Communication	9 000	20 000
Grants	625 000	625 000
Applications, open procedure	500 000	500 000
Applications, topic-specific procedure	125 000	125 000
Projects		
Research platform	0	80 000



# Committee members

A high-calibre research committee comprising renowned lung specialists and professionals from Switzerland decides on the allocation of funds from the Research Fund.

## President of the Research Committee

**Prof. Dr. med. John-David Aubert**

*Senior Physician, Pneumology Department and Transplant Centre, CHUV (Centre hospitalier universitaire vaudois)*

## Vice President of the Research Committee

**Prof. Dr. med. Constance Barazzone-Argiroffo**

*Senior Physician, Head of Department, Department of Pediatric Pneumology, HUG (Hôpitaux Universitaires Genève)*

## Members

**Prof. Dr. med. Konrad E. Bloch**

*Deputy Director, Clinic of Pneumology, University Hospital Zurich*

**Prof. Dr. rer. pol. Stefan Felder**

*Faculty of Economics, University of Basel*

**Prof. Dr. phil. et PhD Nicole Probst-Hensch**

*Head of Department, Epidemiology and Public Health, Swiss Tropical and Public Health Institute, Basel*

**Prof. Dr. med. Thierry Rochat**

*Faculty of Medicine, University of Geneva*

**Prof. Dr. med. Otto Schoch**

*Senior Physician, Clinic of Pneumology and Sleep Medicine, Kantonsspital St. Gallen*

**Prof. Dr. med. Michael Tamm**

*Physician-in-Chief, Clinic of Pneumology, University Hospital Basel*

**PD. Dr. med. Christophe von Garnier**

*Physician-in-Chief, Inselspital, and Head of Tiefenauspital, University Clinic of Pneumology, Inselspital Bern*



→ Would you like to know more about the projects we have funded or would you like to get involved in research funding yourself?

Stephan Mester will be pleased to assist you: 031 378 20 39 or [s.mester@lung.ch](mailto:s.mester@lung.ch)

→ **General information:** [www.lungenliga.ch/forschung](http://www.lungenliga.ch/forschung)

**Information for applicants:** [www.lungenliga.ch/research](http://www.lungenliga.ch/research)

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