

## International Projects

### I6016 Synergetic aerosol remote sensing of Pandora within ACTRIS

call: WEAVE

project lead: KREUTER Axel

university / research place: Institute of Biomedical Physics, Medical University Innsbruck,  
Müllestr. 44, 620 Innsbruck, Tyrol, Austria

decision board: 07.03.2022

lifetime: approved

science discipline:

40% 103 Physics, Astronomy

30% 105 Geosciences

30% 207 Environmental Engineering, Applied Geosciences

keywords: Aerosols, trace gase remote sensing, GRASP, AERONET, PANDORA, LIDAR

### I5894 Behaviors in REM sleep: AI assisted 3D Video Analysis

call: ERA PerMed Call 2021

project lead: HÖGL Birgit

university / research place: University Hospital for Neurology, Medical University of Innsbruck,  
Anichstr. 35, 6020 Innsbruck, Tyrol, Austria

decision board: 27.09.2021

lifetime: 01.04.2022 – 31.03.2025

science discipline:

60% 102 Computer Sciences

40% 302 Clinical Medicine

keywords: REM sleep behavior disorder, Novel stand-alone diagnostic tool, Polysomnography,  
Automatic movement detection, Artificial intelligence, Portable 3D video

### I5406 NECESSITY-New chemical entities modulating SARSCoV2 activity

call: DACH – FWF

project lead: SCHEFFZEK KLAUS

university / research place: Institute of Biological Chemistry, Biocenter Innsbruck, Medical  
University of Innsbruck, Innrain 80-82, 6020 Innsbruck, Tyrol, Austria

decision board: 10.05.2021

lifetime: 01.11.2021 – 31.10.2024

science discipline:

70% 106 Biology

15% 104 Chemistry

15% 303 Health Sciences

keywords: X-ray crystallographic screening, drug repurposing, mutation driven drug resistance, translational virology, kinetic driven rational organic synthesis, inhibition of essential SARS-CoV-2 enzyme

#### **I5364 LIAISON: Novel interaction of Kv channels across families**

call: DACH: DFG

project lead: KUMMER Kai

university / research place: Institute of Physiology, Medical University of Innsbruck, Schöpfstr. 41, 6020 Innsbruck, Tyrol, Austria

decision board: 10.05.2021

lifetime: 01.09.2021 – 31.01.2025

science discipline:

100% 301 Medical-Theoretical Sciences, Pharmacy

keywords: neurophysiology, ion channels, signaling, interactions, potassium

#### **I5192 The structural basis of psilocybin biosynthesis**

call: DACH - FWF

project lead: RUPP Bernhard

university / research place: Institute of Genetic Epidemiology, Medical University of Innsbruck, Schöpfstr. 41, 6020 Innsbruck, Tyrol, Austria

decision board: 23.11.2020

lifetime: 15.07.2021 – 14.07.2024

science discipline:

60% 106 Biology

30% 104 Chemistry

10% 102 Computer Sciences

keywords: Biosynthesis, Psilocybin, Molecular Structure, Crystal Structure

#### **I5177 Mitochondrial dysfunction in ACM pathogenesis**

call: Südtirol - FWF

project lead: TROPMAIR Jakob

university / research place: University Hospital for Visceral, Transplant and Thoracic Surgery, Medical University of Innsbruck, Anichstr. 35, 6020 Innsbruck, Tyrol, Austria

decision board: 28.09.2020

lifetime: 01.01.2021 – 31.12.2023

science discipline:

100% 106 Biology

keywords: arrhythmogenic cardiomyopathy, induced pluripotent stem cells, cardiomyocytes, cardiac stromal cells, mitochondria, ROS signaling

### I5133 Discovery of chemotherapeutic lead-compounds in cyanobacteri

call: CEUS-Central European Science Partnership: GACR

project lead: VILLUNGER Andreas

university / research place: Institute of Developmental Immunology, Biocenter Innsbruck, Medical University of Innsbruck, Innrain 80-82, 6020 Innsbruck, Tyrol, Austria

decision board: 08.03.2021

lifetime: 01.10.2021 – 30.09.2024

science discipline

70% 301 Medical-Theoretical Sciences, Pharmacy

15% 304 Medical Biotechnology

15% 106 Biology

keywords: Krebs, Therapeutika, Cyanobakterien, Zelltod

### I5087 PAiNMSK

call: NKFIH Ungarn - FWF

project lead: KRESS Michaela

university / research place: Institute of Physiology, Medical University of Innsbruck, Schöpfstr. 41, 6020 Innsbruck, Tyrol, Austria

decision board: 28.09.2020

lifetime: 01.02.2021 – 31.01.2025

science discipline

50% 301 Medical-Theoretical Sciences, Pharmacy

50% 302 Clinical Medicine

keywords: nociceptor sensitisation, heat hyperalgesia, inflammatory pain, nociception, sensory neuron

### I4891 Nocturnal periodic breathing at altitude: the consequences

call: Südtirol - FWF

project lead: HÖGL Birgit

university / research place: University Hospital for Neurology, Medical University of Innsbruck, Anichstr. 35, 6020 Innsbruck, Tyrol, Austria

decision board: 11.05.2020

lifetime: 01.01.2021 – 31.12.2023

science discipline:

60% 302 Clinical Medicine

40% 301 Medical-Theoretical Sciences, Pharmacy

keywords nocturnal periodic breathing, high altitude, sympathetic nervous system, acute mountain sickness, sleep quality, high altitude acclimatization

### I4859 microRNA and regulation of MED in prostate cancer

call: DACH

project lead: CULIG Zoran

university / research place: University Hospital for Urology, Medical University of Innsbruck,

Anichstr. 35, 6020 Innsbruck, Tyrol, Austria

decision board: 11.05.2020

lifetime: 01.09.2020 – 31.08.2023

science discipline

60% 301 Medical-Theoretical Sciences, Pharmacy

40% 302 Clinical Medicine

keywords: prostate cancer, mediator complex, therapy resistance, transforming growth factor

#### **I4811 Neurotrophins in developing human inner ear and in HNSCC**

call: JSPS/Japan

project lead: DUDAS József

university / research place: University Hospital for Otorhinolaryngology (ENT), Medical University of Innsbruck, Anichstr. 35, 6020 Innsbruck, Tyrol, Austria

decision board: 09.03.2020

lifetime: 01.09.2020 – 31.08.2024

science discipline

45% 106 Biology

45% 302 Clinical Medicine

10% 301 Medical-Theoretical Sciences, Pharmacy

keywords: radiochemotherapy resistance, fetal inner ear, gene expression profiling, hearing loss  
mutational spectrum, Neurotrophin, tumor cell survival

#### **I4795 Mobility in atyp. parkinsonism: random.trial of physiotherapy**

call: DACH

project lead: WENNING Gregor

university / research place: University Hospital for Neurology, Medical University of Innsbruck,  
Anichstr. 35, 6020 Innsbruck, Tyrol, Austria

decision board: 09.03.2020

lifetime: 01.11.2020 – 31.10.2023

science discipline

70% 302 Clinical Medicine

30% 303 Health Sciences

keywords: wearable sensor-based technologies, physiotherapy, atypic parkinsonian disorders, gait  
impairment, instrumented gait analysis

#### **I4565 Prostate Cancer Therapy Resistance: Impact of Stromal Hetero**

call: DACH

project lead: SAMPSON Natalie

university / research place: University Hospital for Urology, Medical University of Innsbruck,  
Anichstraße 35, 6020 Innsbruck, Tyrol, Austria

decision board: 25.11.2019

lifetime: 01.08.2020 – 31.07.2024

science discipline

85% 301 Medical-Theoretical Sciences, Pharmacy

15% 302 Clinical Medicine

keywords: stroma, heterogeneity, prostate cancer, FACS, microenvironment, therapy resistance

#### **I4239 Personalized Treatment in IgA Nephropathy (PersTigAN)**

call: ERA PERMED

project lead: RUDNICKI Michael

university / research place: University Hospital for Internal Medicine IV, Medical University of Innsbruck Anichstraße 35, 6020 Innsbruck, Tyrol, Austria

decision board: 26.11.2018

lifetime: 01.05.2019 – 30.04.2022

science discipline

75% 302 Clinical Medicine

25% 106 Biology

keywords: Chronic kidney disease, personalized medicine, IgA nephropathy, biomarker, proteomics

#### **I4229 Biomolecular Analyses for Tailored Medicine in AcneInversa (BATMAN)**

call: ERA PERMED

project lead: SCHMUTH Matthias

university / research place: University Hospital for Dermatology, Venerology and Allergology, Medical University of Innsbruck, Anichstraße 35, 6020 Innsbruck, Tyrol, Austria

decision board: 26.11.2018

lifetime: 01.05.2019 – 30.04.2023

science discipline

70% 106 Biology

30% 302 Clinical Medicine

keywords: hidradenitis, inflammation, metabolism, skin, hair follicle

#### **I4220 Novel 99mTc-labeled somatostatin receptor antagonists (TECANT)**

call: ERA PERMED

project lead: VIRGOLINI Irene Johanna

university / research place: University Hospital for Nuclear Medicine, Medical University of Innsbruck, Anichstraße 35, 6020 Innsbruck, Tyrol, Austria

decision board: 26.11.2018

lifetime: 01.07.2019 – 30.06.2023

science discipline

90% 302 Clinical Medicine

10% 301 Medical-Theoretical Sciences, Pharmacy

keywords: Neuroendocrine Neoplasms, SPECT, Antagonists, Technetium-99m, Somatostatin Receptor

#### **I4161 Investigating long non-coding RNA regulated pathways**

call: ERA-CVD

project lead: HAUBNER Bernhard Johannes

university / research place: University Hospital for Internal Medicine III, Medical University of Innsbruck, Anichstraße 35, 6020 Innsbruck, Tyrol, Austria

decision board: 01.10.2018

lifetime: 01.04.2019 – 31.03.2023

science discipline

100% 302 Clinical Medicine

keywords: heart failure, cardiac regeneration, Long non-coding RNA, myocardial infarction, therapy

#### **I4147 Modelling electrical stimulation of the human cochlear nerve**

call: DACH

project lead: SCHROTT-FISCHER Anneliese

university / research place: University Hospital for Otorhinolaryngology, Medical University of Innsbruck, Anichstraße 35, 6020 Innsbruck, Tyrol, Austria

decision board: 01.10.2018

lifetime: 01.03.2019 – 31.08.2022

science discipline

50% 206 Medical Engineering

50% 301 Medical-Theoretical Sciences, Pharmacy

keywords: human inner ear, computational modelling, finite element modelling, cochlea implant, hearing loss

#### **I4140 Glutamine metabolism as potential target for prostate cancer**

call: DACH

project lead: SKVORTSOV Sergej

university / research place: University Hospital for Radiotherapy, Medical University of Innsbruck, Anichstraße 35, 6020 Innsbruck, Tyrol, Austria

decision board: 01.10.2018

lifetime: 01.03.2019 – 28.02.2023

science discipline

50% 301 Medical-Theoretical Sciences, Pharmacy

35% 106 Biology

15% 302 Clinical Medicine

keywords: Radiosensitization, Biomarkers, Prostate Cancer, Radiation Therapy

#### **I3984 3D diffractive elements through fs-laser direct writing**

call: DACH

project lead: JESACHER Alexander

university / research place: Department for Physiology and Medical Physics, Medical University of Innsbruck, Schöpfstraße 41, 6020 Innsbruck, Tyrol, Austria

decision board: 11.03.2019

lifetime: 07.01.2020 – 06.01.2023

science discipline

50% 103 Physics, Astronomy

25% 202 Electrical Engineering, Electronics, Information Engineering

25% 102 Computer Sciences

keywords: diffractive optical elements, femtosecond laser direct writing

### I3978 IBDome

call: DACH

project lead: TRAJANOSKI Zlatko

university / research place: Division of Bioinformatics, Biocenter Innsbruck, Medical University of Innsbruck, Innrain 80-82, 6020 Innsbruck, Tyrol, Austria

decision board: 25.06.2018

lifetime: 01.08.2018 – 31.07.2022

science discipline

100% 106 Biology

keywords

inflammatory bowel diseases, database, bioinformatics

### I3976 Predictive markers of immune checkpoint inhibitor therapy

call: NKFIH/Ungarn

project lead: DUDAS József

university / research place: University Hospital for Otorhinolaryngology, Medical University of Innsbruck, Anichstr. 35, 6020 Innsbruck, Tyrol, Austria

decision board: 01.10.2018

lifetime: 01.03.2019 – 28.02.2023

science discipline

55% 301 Medical-Theoretical Sciences, Pharmacy

45% 302 Clinical Medicine

keywords: immune checkpoint, immunohistochemistry, predictiv

### I3132 The gamma-core motif of antifungal proteins of Ascomycetes

call: NKFIH/Ungarn

project lead: MARX-LADURNER Florentine

university / research place: Division of Molecular Biology, Medical University of Innsbruck, Biocenter Innsbruck, Innrain 80 - 82, 6020 Innsbruck, Tyrol, Austria

decision board: 03.10.2016

lifetime: 01.05.2017 – 30.04.2022

science discipline

100% 106 Biology

keywords: gamma-core protein motif, antifungal proteins and peptides, structure-function relation, antifungal drug development