

## International Projects

### I6642 Regulation of cell death decisions

call: DFG; DACH

project lead: VILLUNGER Andreas

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

decision board: 26.06.2023

lifetime: 01.10.2023 – 30.09.2027

science discipline

67% 301 Medical-Theoretical Sciences, Pharmacy

33% 106 Biology

keywords: p53, apoptosis, mitotic errors, caspases

### I6838 The role of tissue anisotropy in quantitative brain MRI

call: WEAVE

project lead: BIRKL Christoph

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

decision board: 02.10.2023

lifetime: 01.01.2024 – 31.12.2027

science discipline

70% 302 Clinical Medicine

20% 106 Biology

10% 104 Chemistry

keywords: quantitative MRI, tissue anisotropy, MR relaxation, quantitative susceptibility mapping, post mortem MRI, human brain

### I6613 Artificial Siderophores for molecular imaging applications

call: WEAVE

project lead: DECRISTOFORO Clemens

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

decision board: 26.06.2023

lifetime: 01.01.2024 – 31.12.2026

science discipline

50% 302 Clinical Medicine

40% 301 Medical-Theoretical Sciences, Pharmacy

10% 106 Biology

Keywords: PET, Optical Imaging, infection, molecular imaging, Artificial Siderophores, Biomimetics

### **16493 Fine-Structure-Based Models for Cochlear Implant Advancement**

call: WEAVE

project lead: GLÜCKERT Rudolf

university / research place: University Hospital for Otorhinolaryngology (ENT), Hearing, Speech & Voice Disorders, Medical University of Innsbruck, Anichstr. 35, 6020 Innsbruck; Tyrol, Austria

decision board: 02.05.2023

lifetime: 01.10.2023 – 30.09.2026

science discipline:

60% 102 Computer Sciences

40% 106 Biology

keywords: auditory nerve, cochlear implant, simulation, voltage-gated ion channels, spiral ganglion, innervation

### **16477 EURONET-NF: improved diagnostics of the neurofibromatosis**

call: ERA European Joint Programme on Rare Diseases Joint Transnational Call 2022

project lead: WIMMER Katharina

university / research place: Institute of Human Genetics, Medical University of Innsbruck, Schöpfstr. 24, 6020 Innsbruck, Tyrol, Austria

decision board: 03.10.2022

lifetime: 16.06.2023 – 15.06.2026

science discipline:

100% 301 Medical-Theoretical Sciences, Pharmacy

keywords: neurofibromatoses, schwannomatosis, genomic medicine, mosaicism, targeted RNA sequencing

### **16471 Body fluid proteome SIGNatures for personNALised interventio (SIGNAL)**

call: ERA PerMed Joint Translational Call 2022

project lead: MAYER Gert

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

decision board: 03.10.2022

lifetime: 02.05.2023 – 01.05.2026

science discipline:

50% 301 Medical-Theoretical Sciences, Pharmacy

25% 102 Computer Sciences

25% 302 Clinical Medicine

keywords: Diabetes mellitus type 2, precision medicine, urinary proteomics, predictive biomarkers, health economics

#### **I6470 Multi-omics signature of kidney fibrosis (KidneySign)**

call: ERA PerMed Joint Translational Call 2022

project lead: DENICOLO Sara

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

decision board: 03.10.2022

lifetime: 02.05.2023 – 01.05.2026

science discipline:

55% 301 Medical-Theoretical Sciences, Pharmacy

30% 102 Computer Sciences

15% 101 Mathematics

keywords: Chronic kidney disease, progression, kidney fibrosis, proteomics, biomarker, ethics

#### **I6471 Body fluid proteome SIGNatures for personNALised interventio (SIGNAL)**

call: ERA PerMed Joint Translational Call 2022

project lead: MAYER Gert

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

decision board: 03.10.2022

lifetime: 02.05.2023 – 01.05.2026

science discipline:

50% 301 Medical-Theoretical Sciences, Pharmacy

25% 302 Clinical Medicine

25% 102 Computer Sciences

keywords: Diabetes mellitus type 2, precision medicine, urinary proteomics, predictive biomarkers, health economics

#### **I6122 UVISION 1.1**

call: WEAVE

project lead: GOSTNER Johanna

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

decision board: 27.06.2022

lifetime: 15.01.2023 – 14.01.2026

science discipline:

65% 301 Medical-Theoretical Sciences, Pharmacy

25% 104 Chemistry

10% 106 Biology

keywords: mycosporine-like amino acids, marine resources, UV protection, mode of action, human cell model, bioactivity-guided screening

#### **16057 TRR241 Immune-epithelial communication in IBD**

call: DFG; DACH

project lead: TRAJANOSKI Zlatko

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

decision board: 27.06.2022

lifetime: 01.08.2022 – 31.07.2026

science discipline:

100% 102 Computer Sciences

keywords: inflammatory bowel diseases, multi-omics, database

#### **16016 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: 01.08.2022 – 31.07.2026

science discipline:

40% 103 Physics, Astronomy

30% 105 Geosciences

30% 207 Environmental Engineering, Applied Geosciences

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

#### **15894 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

#### **15406 NECESSITY-New chemical entities modulating SARSCoV2 activity**

call: DACH – FWF

project lead: DUNZENDORFER-MATT Theresia

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 – 31.10.2025

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 – 31.08.2025

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 – 14.07.2025

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 – 31.12.2024

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

### **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 – 31.08.2024

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 – 31.10.2024

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 – 31.07.2025

science discipline

85% 301 Medical-Theoretical Sciences, Pharmacy

15% 302 Clinical Medicine

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