

Sabrina Summer, PhD

Personal Data

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Current Positions

Since 03/2021 Postdoctoral Researcher in the

Project title: ImageHead Start-Bahnbrechende Computer Vision-
Anwendungen in der Mikrowelt: Industry Research Consortium 4.0
Funding agency: Interreg
Principal Investigator: Univ. Prof. Dr. M. B. Fischer
Center for Experimental Medicine, University for Continuing Education
Krems, Austria

Work Experience

12/2019 – 02/2021 Postdoctoral Researcher / Coordinator of RNA laboratory

Project title: Molecular 3D model of the human liver
Principal Investigator: Dr. Wolfgang Weninger
Center for Anatomy, Medical University Vienna, Austria

03/2020 – 05/2020 Research Assistant / SARS-CoV-2 diagnostic

Routine testing of SARS-CoV-2 specimens
Study on the minimal transport conditions of SARS-CoV-2 specimens for
diagnostic
Division of clinical Virology, Medical University Vienna, Austria

04/2015 – 08/2019 Postgraduate Researcher / PhD student

Project title: Functional characterization of YBEY in mitochondrial ribosome
assembly
Funding agency: Doktoratskolleg RNA Biology, Austrian Science Fund (FWF)

Principal Investigator: Dr. Walter Rossmannith
Center for Cell Biology, Medical University Vienna, Austria

01/2014 –12/2014 Research Assistant / Master student

Project title: The function of type III interferons in the mucosal immune response

Principal Investigator: O.Univ.-Prof. Dr.med.vet. Mathias Müller
University of Veterinary Medicine Vienna, Austria

Education

04/2015 – 06/2020 PhD studies, Medical University Vienna (SFB RNA Biology PhD program)

Vienna, Austria

2020 Promotion PhD

Thesis title: YBEY is an essential biogenesis factor for mitochondrial ribosome assembly

11/2020 SAP Foundation certificate, WIFI Vienna

11/2019 - 12/2019 Project Management and Team Leading, Karl-Franzens University Graz

10/2013 – 03/2015 Master studies, University Vienna

Vienna, Austria

2015 Graduation MSC

Thesis title: The role of interferons in the mucosal immune response to enteropathogens

10/2008 – 10/2013 Bachelor studies, University Vienna

Vienna, Austria

2013 Graduation BSC

Thesis title: The role of the RNA chaperone Hfq in the metabolism and virulence of *Pseudomonas aeruginosa*

Research Interests

- Tissue Regeneration
- Immunomodulation
- T-cell activation
- Chronic inflammatory diseases

Memberships in Professional Societies

ESAO European Society of Artificial Organs

Teaching

- Lecture for “Molecular and Statistical Analysis” (SSM2) at the Medical University Vienna, Austria.
- Supervision of bachelor and PhD students at the Medical University Vienna, Austria

Manuskripts

Rossmann E., S. Summer, M. Pasztorek, C. Fiedler, M. Groeger, S. Rauscher, V. Weber, M. B. Fischer. (2022). Mesenchymal stem cells support human vascular endothelial cells to form vascular sprouts in human platelet lysate-based matrices. *BioRxiv*. 01.31.478452.

Summer S, Schmidt R, Herdina A, Krickl I, Madner J, Greiner G, Mayer FJ, Perkmann-Nagele N, Strassl R. (2021) Detection of SARS-CoV-2 by real-time PCR under challenging pre-analytical conditions reveals independence of swab media and cooling chain. *Sci Rep*. 11, 13592.

Summer S, Smirnova A, Gabriele A, Toth U, Fasmore AM, Förstner KU, Kuhn L, Chicher J, Hammann P, Mitulović G, Entelis N, Tarassov I, Rossmann W, Smirnov A. (2020) YBEY is an essential biogenesis factor for mitochondrial ribosomes. *Nucleic Acids Research*. Vol 48,17, 25, 9762–9786.

Selected Congress Contributions

RNA SOCIETY MEETING 2018 | Berkley, CA, USA, Poster presentation
“YBEY, the human homolog of a bacterial endoribonuclease, plays an essential role in human mitochondria”

Targeting Mitochondria 2016 | Berlin, Germany, Poster presentation
“Characterization of p19, a potential player in mitochondrial RNA metabolism”

28th ANNUAL CONFERENCE OF THE EUROPEAN MACROPHAGE AND DENDRITIC CELL SOCIETY
2014 | Vienna, Austria, Poster presentation
“The role of IFN- λ in the mucosal immune response”, Poster presentation