

CV - Pietro Scaturro, Dr.

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Born 6th of October 1985, Palermo (Italy)
Nationality Italian



PROFESSIONAL EXPERIENCE

- 2020- **Junior Research Group Leader**
Leibniz Institute of Virology, Germany
Systems Arbovirology Laboratory
- 2018-2019 **Senior Research Scientist**
Technical University of Munich, Munich, Germany – Prof. Andreas Pichlmair
Department of Virology – Immunopathology of Virus Infections
- 2016-2019 **Post-Doctoral Researcher**
Max-Planck Institute of Biochemistry, Munich, Germany - Prof. Andreas Pichlmair
Department of Proteomics and Signal Transduction – Prof. Matthias Mann
- 2010-2015 **PhD Marie-Curie Fellow**
University of Heidelberg, Heidelberg, Germany – Prof. Ralf Bartenschlager
Department of Infectious Diseases/Molecular Virology
- 2010 **Visiting Scientist**
University of Bologna, Bologna, Italy – Prof. Gabriella Campadelli-Fiume
Department of Experimental Pathology, Microbiology and Virology
- 2009 **Visiting Scientist**
University of Alabama at Birmingham, Birmingham, AL, USA – Prof. James M. Markert
Department of Neurosurgery – Laboratory of Infectious Diseases

ACADEMIC EDUCATION

- 2015 **PhD (Dr. Rer. Nat.) in Molecular Virology and Marie-Curie Fellow**
University of Heidelberg, Department of Molecular Virology
Thesis: "Functional and biochemical characterization of Dengue virus non-structural protein NS1"
Final grade: 1.0 summa cum laude (high distinction)
- 2010 **Master degree in Molecular Biotechnologies**
University of Bologna, Department of Experimental Pathology
Thesis: "Immunotherapy of breast cancer metastatic to the CNS using cytokine-expressing HSV-1 *in vitro* and *in vivo*"
Final grade: 110/110 summa cum laude (high distinction)

2007 **Bachelor degree in Biotechnologies**
University of Bologna, Department of Experimental Pathology
Thesis: "Construction of a recombinant Herpes simplex virus carrying a chimeric gD to obtain oncolytic viruses specifically retargeted to mammary tumor receptor HER2/neu"
Final grade: 106/110

AWARDS & FUNDING

2022-2025 BMBF – VirMScan – Development of diagnostic kit for detection of multiple respiratory viruses by mass-spectrometry
2021-2024 Leibniz Center of Infection - Global profiling of susceptibility factors across flaviviruses in mosquitoes
2021-2022 SARS-CoV-2-mediated liver injury – DFG – German Ministry for Education and Research
2020-2026 Leibniz Association – ArboSys – (Systems Arbovirology Laboratory)
2019 Junior Scientist Publication Award – Max Planck Institute of Biochemistry. Martinsried, Germany
2019 Keystone Symposia Future of Science Fund – Keystone Symposia on Positive-strand RNA viruses. Killarney, Ireland, 2019.
2019 ESV Travel Award for the European Congress of Virology, Rotterdam, Netherlands
2018 Best Oral Presentation Award – *Viruses: Breakthroughs in Viral Replication*, Barcelona, Spain
2011-2014 Marie-Curie Fellowship EU 7FWP – EUVIRNA ITN (project ESR-5)
2014 Best Poster Presentation Award - International Conference for Antiviral Research, Raleigh, US
2009 Fellowship as Visiting Scientist from University of Alabama at Birmingham – Department of Neurosurgery

TEACHING & INSTITUTIONAL ACTIVITIES

2021 - LIV Virology Lecture SoSe – University of Hamburg;
Advanced Proteomics – University of Hamburg
LCI graduate school – Leibniz Center for Infection
2020 - Faculty and Staff committee member, LIV, Germany
2019 – Co-lecturer – Master in Medical and Molecular Virology, Technical University of Munich, Germany
2019 – Co-supervisor – Practical laboratory in Molecular Virology, Technical University of Munich, Germany

SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

2020- now 2 Post-Doctoral Fellow, 3 PhD Student, 2 Master students, 1 Bachelor student, 2 TA (LIV, Systems Arbovirology, Hamburg)
2015 – 2019 2 Master Thesis (1 finished), co-supervision of 1 PhD student, 2 Technical assistants
2010 – 2015 Supervision on 1 Bachelor student, training and co-supervision of 1 PhD student, 2 Post-docs and Master students; Molecular Virology, Department of Virology, Heidelberg University, Germany

REVIEWING ACTIVITIES

2022- Co-Chair – GfV, Munich.
2022- Grant Reviewer for the Wellcome Trust, UK
2020- Grant Reviewer for the DLR/DFG German Ministry; COVID-19 call.
2018- Evaluator/Grant reviewer for the Hong Kong Research Grant Council (RGC)(2018).
2014- Reviewer for Nature Communications, eLIFE, PLoS Pathogens, Journal of Virology, Pathogens, PLoSONE, Journal of Proteomics Research, Viruses.

MEMBERSHIPS OF SCIENTIFIC SOCIETIES & JOURNALS

-Member of the European Society for Virology (ESV) (2017-), the Italian Society for Virology (SIV-ISV) (2018-), the German Society for Virology (GfV)(2020-) and the International Society for Antiviral Research (ISAR) (2015).

-Board of Reviewers, **Viruses**, 2020.

-Editorial Board, **Frontiers in Microbiology**. 2022

PUBLICATIONS (10 selected/ out of 19 total)

*Corresponding author(s)/Equally contributing

1. Wanner N, Andrieux G, Badia-i-Mompel P, Edler C, Pfefferle S, Lindenmeyer MT, Schmidt-Lauber C, Czogalla J, Wong MN, Okabayashi Y, Braun F, Lütgehetmann M, Meister E, Lu S, Noriega MLN, Günther T, Grundhoff A, Fischer N, Bräuninger H, Lindner D, Westermann D, Haas F, Roedl K, Kluge S, Addo MM, Huber S, Lohse AS, Reiser J, Ondruschka B, Sperhake JP, Saez-Rodriguez J, Boerries M, Hayek SS, Aepfelbacher M, **Scaturro P***, Puellas VG*, Huber TB*. Deciphering the molecular consequences of SARS-CoV-2 liver tropism. **Nature Metabolism**. 2022
2. Simanjuntak Y, Schamoni-Kast K, Grün A, Uetrecht C*, **Scaturro P***. Top-Down and Bottom-Up Proteomics Methods to Study RNA Virus Biology. **Viruses**. 2021
3. Stukalov A, Girault V, Grass V, Bergant V, Karayel O, Urban C, Haas DA, Huang Y, Oubraham, L Wang A, Hamad SM, Piras A, Tanzer M, Hansen FM, Enghleitner T, Reinecke M, Lavacca TM, Ehmann R, Wölfel R, Jores J, Kuster B, Protzer U, Rad R, Ziebuhr J, Thiel V, **Scaturro P**, Mann M, Pichlmair A. Multi-level proteomics reveals host-perturbation strategies of SARS-CoV-2 and SARS-CoV. **Nature**. 2021
4. Neufeldt CJ, Cortese M, **Scaturro P**, Cerikan B, Wideman J, Tabata K, Pichlmair A, Bartenschlager R. ER-shaping *Atlastin* proteins differentially contribute to flavivirus replication and assembly. **Nature Microbiology**. 2019.
5. Cortese M, Kumar A, Matula P, Kaderali L, **Scaturro P**, Erfle H, Acosta EG, Buehler S, Chatel-Chaix L, Rohr K, Bartenschlager R. Reciprocal effects of fibroblast growth factor receptor signaling on Dengue virus replication and virion production. **Cell Reports**. 2019.
6. Hubel P, Knauer B, Schneider WM, **Scaturro P**, Bergant W., Urban C., Stukalov A, Mann A, Brunotte L, Hoffmann H, Schoggins JW, Schwemmle M, Mann M, Rice CM, Pichlmair A. A protein interaction network of interferon stimulated genes extends the innate immune system landscape. **Nature Immunology**. 2019.
7. **Scaturro P**, Stukalov A, Haas D, Cortese M., Draganova K, Płaszczycza A, Bartenschlager R, Götz M and Pichlmair A*. An Orthogonal Proteomic Screen of Zika virus Reveals Specific Targeting of Neuronal Differentiation Factors. **Nature**. 2018
8. Chatel-Chaix L, Cortese M, Romero-Brey I, Bender S, Neufeldt CJ, Fischl W, **Scaturro P**, Schieber N, Schwab Y, Fischer B, Ruggieri A, Bartenschlager R. Dengue Virus Perturbs Mitochondrial Morphodynamics to Dampen Innate Immune Responses. **Cell Host & Microbe**. 2016.
9. **Scaturro P**, Cortese M, Chatel-Chaix L, Fischl W, Bartenschlager R*. Dengue virus non-structural protein 1 modulates infectious particle production via interaction with the structural proteins. **PLoS Pathogens**. 2015 [mentioned amongst 10% most cited papers of 2015 by PLoS Pathogens]
10. **Scaturro P**, Trist I, Paul D, Kumar A, Acosta EG, Byrd CM, Jordan R, Brancale A, Ralf Bartenschlager. Characterization of the mode-of-action of a potent Dengue virus Capsid inhibitor. **Journal of Virology**. 2014.

Invited Seminars & Selected Communications

Orthogonal proteomics to unlock (Re-)Emerging viruses.

Center for Systems and Structural Biology. 2022

*Invited Seminar

Orthogonal proteomics to decipher the host infected landscape.

International Virtual Seminars on Arbovirus Biology. 2021

*Invited Seminar

Orthogonal systems biology to unlock emerging arboviruses*.

Max-Planck Institute for Infectious Diseases. Berlin, Germany. 2019

*Invited Seminar.

Zika virus: orthogonal proteomics to decipher the host-infected landscape*.

Paul-Erlich-Institut, Federal Institute for Vaccines and Biomedicines. Langen, Germany. 2018

*Invited Seminar.

Zika virus: orthogonal proteomics to decipher the host-infected landscape*.

University of Rome Tor Vergata, Department of Biology. Rome, Italy. 2018

*Invited Seminar.

An Orthogonal Proteomic Screen of Zika virus uncovers novel Host-dependency factors*.

Scaturro P, Stukalov A, Haas DA, Cortese M, Płaszczycza A, Draganova K, Bartenschlager R, Goetz M, Pichlmair A. **Viruses 2018 – Breakthroughs in Viral Replication.** Barcelona, Spain. 2018.

*Oral presentation.

Dengue virus non-structural protein 1 modulates infectious particle production via interaction with the structural proteins.

Scaturro P, Cortese M, Chatel-Chaix L, Fischl W, Bartenschlager R. **22nd International Symposium on Hepatitis C and Related Viruses.** Strasbourg, France. 2015.

*Oral presentation.

Functional and biochemical characterization of Dengue virus Non-Structural protein 1*.

Max-Planck Institute of Biochemistry. Munich, Germany.

*Invited Seminar

Characterization of the mode-of-action of a potent Dengue virus Capsid inhibitor*.

Scaturro P, Trist I, Paul D, Kumar A, Acosta EG, Byrd CM, Jordan R, Brancale A, Ralf Bartenschlager. **27th International Conference on Antiviral Research (ICAR).** Raleigh, NC, USA. 2014.

*Invited Speaker; Oral presentation.

SCIENTIFIC COLLABORATIONS (only active, listed in detail)

INTERNATIONAL:

prof. Laurent Chatel-Chaix, Centre INRS–Institut Armand-Frappier, CANADA (*Molecular Virology of Flaviviruses/Innate Immunity*); **Dr. Lorenzo Subissi**, WHO, Genève, Switzerland (*SARS CoV2 Evolution Surveillance*); **prof. Jelke Fros**, Wageningen University, The Netherlands (*Evolution & Synthetic Biology*); **prof. Alain Kohl**, MRC-University of Glasgow Centre for Virus Research (*CCHFV & Arboviruses*); **Dr. Mirko Cortese**, TIGEM, Italy (*EM & CLEM*).

NATIONAL:

prof. Gülsah Gabriel, LIV (*in vivo models*); **prof. Maya Topf**, CSSB/LIV (*Bioinformatics & Machine Learning*); **prof. Daniela Mauceri**, Heidelberg University (*Neurobiology*), **prof. Florian Meier**, University of Jena (*Mass-Spectrometry*); **Dr. Stefan Seitz**, German Cancer Research Center (DKFZ), Heidelberg (*HBV & Viral Evolution*), **prof. Victor Puelles**, University Hospital Eppendorf (*Tissue Clearance & SARS CoV2*); **prof. Dr. Jonas Schmidt-Chanasit**, Bernard Nocht Institute for Tropical Medicine (*mosquito infection work*); **prof. Dr. Stefan Urban**, Heidelberg University (*HBV & HDV*), **Dr. Alessia Ruggieri**, Heidelberg University (*Stress Granules*)

LANGUAGES

Italian (native speaker), English (C1, excellent proficiency), German (B1, basic proficiency).