

Stein, Jens V.

Professor for Immunology

University of Fribourg

Department of Oncology, Microbiology and Immunology (OMI)

Chemin du Musée 5

1700 Fribourg/Switzerland

Tel. (+ 41) 26 300 8602

e-mail: jens.stein@unifr.ch

web: <https://www.unifr.ch/med/de/research/groups/stein/>

ORCID: 0000-0002-8199-9586



Academic education

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|------|---|
| 1999 | Ph.D. in Immunology, University Louis Pasteur, Strasbourg, France (Advisor: Diane Mathis) |
| 1995 | M. Sc. In Molecular and Cellular Biology, ESBS, Strasbourg, France |

Positions and training

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|----------------|---|
| 2018 – present | Full professor in Immunology, University of Fribourg, Switzerland |
| 2012 – 2018 | Associate professor, University of Bern, Switzerland |
| 2010 | Venia docendi in Immunology |
| 2004 – 2012 | Junior group leader, University of Bern, Switzerland |
| 1999 – 2004 | Postdoctoral fellow, CNB, Madrid, Spain (Advisor: Carlos Martínez-Alonso) |
| 1995 – 1999 | Ph. D. thesis, Harvard Medical School, Boston, USA (Advisor: Ulrich H. von Andrian) |

Awards

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| 2006 | Marie Curie Excellence grant |
| 2005 – 2006 | Roche Research Foundation grant |
| 2003 – 2004 | “Ramón y Cajal” Young Investigator fellowship |
| 2000 – 2003 | Human Frontiers Science Program long-term fellowship |
| 1999 – 2000 | EMBO long-term fellowship |

Current funding (starting in 2016 or later)

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| 2023 - 2024 | SNF R'equip grant “Versatile two- and three-photon intravital microscopy workstation for life science research” (CHF 407'919, with multiple users at UNIFR) |
| 2023 - -2027 | SNF Sinergia grant “ImMuNet: Decoding the Immunological Microtubule Network” (CHF 3'192'883 with Prof. Fierz, EPFL; Prof. Aumeier, UNIGE and Prof. Sixt, ISTA, Klosterneuburg, Austria) |
| 2021 – 2025 | SNF project “Exploring tissue-specific CD8 ⁺ T cell-mediated host protection at single cell resolution” (CHF 720'000) |
| 2021 – 2023 | San Salvatore Foundation “Impact of the tyrosine kinase inhibitor dasatinib on lymphoid tissue microenvironment and tumor cell niche” (CHF 187'289) |

2021 – 2025	SNF Lead Agency project “Exploring lymphatic endothelium-innate immune system crosstalk in lymph nodes and its impact on adaptive immunity” (CHF 720'000 + € 386'413 for Prof. Müller, University of Strasbourg, France)
2020	Forschungspool UNIFR “Photoconversion for immune surveillance” (CHF 25'000)
2019 - 2020	SNF R'equip grant “Multichannel confocal microscope with fluorescence lifetime imaging for life science samples” (CHF 401'028, with multiple users at UNIFR)
2019 – 2021	SNF SPARK project grant “Using super-resolution shadow imaging (SUSHI) to quantify the extracellular space structure in tissue sections (CHF 96'400)
2017 – 2021	SNF project grant “Immunology in context: Analyzing adaptive immunity through advanced microscopy” (CHF 700'000)
2016 – 2017	Stiftung für klinisch-experimentelle Tumorforschung “Investigations on the roles of VLA-4 and α V integrin in the formation of tumor metastasis” (CHF 73'000, with Prof. Lyck, UBERN)
2017 – 2022	SNF Sinergia grant “Reaction-diffusion networks underlying pattern formation of lymphoid tissue” (CHF 1'695'336; with Prof. Bruggmann, UBERN and Prof. Sharpe, EMBO, Spain)
2016 – 2017	CTI grant “Selective small molecule LFA-1 inhibitors to restore self-protective immune privilege in non-infectious posterior uveitis” (CHF 395'320 with Alloocyte and partners)

Publications 2016 – 2025 (*, corresponding author)

Macrophages coordinate immune response to laser-induced injury via extracellular traps. Conedera FM, Kokona D, Zinkernagel MS, **Stein JV**, Lin CP, Alt C, Enzmann V. *J Neuroinflammation*. 2024 Mar 18;21(1):68. doi: 10.1186/s12974-024-03064-0.

Exocrine gland-resident memory CD8⁺ T cells use mechanosensing for tissue surveillance. Ruef N, Martínez Magdaleno J, Ficht X, Purvanov V, Palayret M, Wissmann S, Pfenninger P, Stolp B, Thelen F, Barreto de Albuquerque J, Germann P, Sharpe J, Abe J, Legler DF, **Stein JV***. *Sci Immunol*. 2023 Dec 22;8(90):eadd5724. doi: 10.1126/sciimmunol.add5724. Epub 2023 Dec 22

Assessing the role of T cells in response to retinal injury to uncover new therapeutic targets for the treatment of retinal degeneration. Conedera FM, Runnels JM, **Stein JV**, Alt C, Enzmann V, Lin CP. *J Neuroinflammation*. 2023 Sep 9;20(1):206. doi: 10.1186/s12974-023-02867-x.

Regulator of G-protein signaling 1 critically supports CD8 T_{RM} cell mediated intestinal immunity. von Werdt D, Gruber T, Barreto de Albuquerque J, Zysset D, KC Kwong Chung C, Page N, Schenk M, Kehrl JH, Merkler D, **Stein JV**, Hayday AC, Corazza N, Mueller C. 2023. *Front Immunol*. 2023 Apr 20;14:1085895. doi: 10.3389/fimmu.2023.1085895. eCollection 2023.

B cell-intrinsic requirement for WNK1 kinase in T cell-dependent antibody responses. Hayward D, Vanes L, Wissmann S, Sivapatham S, Hartweg H, O'May JB, De Boer L, Mitter R, Köchl R, **Stein JV**, Tybulewicz VLJ. *J Exp Med*. 2023 Mar 6;220(3):e20211827. doi: 10.1084/jem.20211827. Epub 2023 Jan 20.

Dasatinib regulates splenic stroma contractility and lymphocytosis. Marcos Jiménez A, Claudino Carvoeiro D, Ruef N, Cuesta-Mateos C, Roy-Vallejo E, Gómez-García de Soria V, Laganá C, del Campo L, Zubiaur P, Villalpos-García G, Abad-Santos F, **Stein JV***, Muñoz Calleja C*. *Blood Adv*. 2022 Dec 30;bloodadvances.2022009279. doi: 10.1182/bloodadvances.2022009279.

Editorial: The cytoskeleton in T cell migration and activation. Butte MJ, **Stein JV**, Delon J. *Front Immunol*. 2022 Oct 14;13:1057533. doi: 10.3389/fimmu.2022.1057533. eCollection 2022.

3-Dimensional Imaging Reveals Immune-Driven Tumour-Associated High Endothelial Venules as a Key Correlate of Tumour Rejection Following Depletion of Regulatory T Cells. Milutinovic S, Abe J, Jones E, Kelch I, Smart K, Lauder S, Somerville M, Ware C, Godkin A, **Stein JV**, Bogle G, Gallimore A. *Cancer Res Commun*. 2022 Dec 15;2(12):1641-1656. doi: 10.1158/2767-9764.CRC-21-0123.

DOCK2 and phosphoinositide-3 kinase δ mediate two complementary signaling pathways for CXCR5-dependent B cell migration. Wissmann S, Stolp B, Jiménez AM, **Stein JV***. *Front Immunol*. 2022 Oct 19;13:982383. doi: 10.3389/fimmu.2022.982383. eCollection 2022. PMID: 36341455.

Multitier mechanics control stromal adaptations in the swelling lymph node. Assen FP, Abe J, Hons M, Hauschild R, Shamipour S, Kaufmann WA, Costanzo T, Krens G, Brown M, Ludewig B, Hippenmeyer S, Heisenberg CP, Weninger W, Hannezo E, Luther SA, **Stein JV**, Sixt M. *Nat Immunol*. 2022 Aug;23(8):1246-1255. doi: 10.1038/s41590-022-01257-4. Epub 2022 Jul 11.

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Organ-specific surveillance and long-term residency strategies adapted by tissue-resident memory CD8⁺ T cells. **Stein JV***, Ruef, N, Wissmann S. *Front Immunol*. 2021. 2021 Feb 15;12:626019. doi: 10.3389/fimmu.2021.626019. eCollection 2021.

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The Dual Role of High Endothelial Venues in Cancer Progression versus Immunity. Milutinovic S, Abe J, Godkin A, **Stein JV**, Gallimore A. *Trends Cancer*. 2020 Oct 29:S2405-8033(20)30264-8. doi: 10.1016/j.trecan.2020.10.001. Online ahead of print.

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Toolbox for In Vivo Imaging of Host-Parasite Interactions at Multiple Scales. De Niz M, Spadin F, Marti M, **Stein JV**, Frenz M, Frischknecht F. *Trends Parasitol*. 2019 Mar;35(3):193-212. doi: 10.1016/j.pt.2019.01.002. Epub 2019 Feb 10. Review.

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Influenza Vaccination Induces NK-Cell-Mediated Type-II IFN Response that Regulates Humoral Immunity in an IL-6-Dependent Manner. Farsakoglu Y, Palomino-Segura M, Latino I, Zanaga S, Chatziandreu N, Pizzagalli DU, Rinaldi A, Bolis M, Sallusto F, **Stein JV**, Gonzalez SF. *Cell Rep*. 2019 Feb 26;26(9):2307-2315.e5. doi: 10.1016/j.celrep.2019.01.104.

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HIV-1 Nef Disrupts CD4⁺ T Lymphocyte Polarity, Extravasation, and Homing to Lymph Nodes via Its Nef-Associated Kinase Complex Interface. Lamas-Murua M, Stolp B, Kaw S, Thoma J, Tsopoulidis N, Trautz B, Ambiel I, Reif T, Arora S, Imle A, Tibroni N, Wu J, Cui G, **Stein JV**, Tanaka M, Lyck R, Fackler OT. *J Immunol*. 2018 Nov 1;201(9):2731-2743. doi: 10.4049/jimmunol.1701420.

Fam65b Phosphorylation Relieves Tonic RhoA Inhibition During T Cell Migration. Megrelis L, El Ghouli E, Moalli F, Versapuech M, Cassim S, Ruef N, **Stein JV**, Mangeney M, Delon J. *Front Immunol*. 2018 Sep 11;9:2001. doi: 10.3389/fimmu.2018.02001. eCollection 2018.

Leukocyte Tracking Database, a collection of immune cell tracks from intravital 2-photon microscopy videos. Pizzagalli DU, Farsakoglu Y, Palomino Segura M, Palladino E, Sintès J, Marangoni F, Mempel T, Koh W, Murooka T, Thelen F, **Stein JV**, Pozzi G, Thelen M, Krause R, Gonzalez S. *Sci Data*. 2018. Jul 17;5:180129. doi: 10.1038/sdata.2018.129.

The Rho regulator Myosin IXb enables non-lymphoid tissue seeding of protective CD8⁺ T cells. Moalli F, Ficht X, Germann P, Vladymyrov M, Stolp B, de Vries I, Lyck R, Balmer J, Kreutzfeld M, Merkler D, Iannacone M, Ariga A, Stoffel M, Sharpe J, Bähler M, Sixt M, Diz-Muñoz A, **Stein JV***. 2018. *J Exp Med* (2018) **215**:1869–1890. doi:10.1084/jem.20170896.

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A Novel Cervical Spinal Cord Window Preparation Allows for Two-Photon Imaging of T-Cell Interactions with the Cervical Spinal Cord Microvasculature during Experimental Autoimmune Encephalomyelitis. Haghayegh Jahromi N, Tardent H, Enzmann G, Deutsch U, Kawakami N, Bittner S, Vestweber D, Zipp F, **Stein JV**, Engelhardt B. *Front Immunol*. 2017 Apr 11;8:406. doi: 10.3389/fimmu.2017.00406. eCollection 2017.

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