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Ewoud B. Compeer

Curriculum Vitae

Education

| May 2017 - present | Michael Dustin lab, University of Oxford, United Kingdom. Kennedy Institute of Rheumatology. Post-doc. Endosomal trafficking to the immunological synapse to build T cell-derived extracellular vesicles and Supramolecular Attack Particles. | |
|---------------------------|--|--|
| May 2015 - Dec. 2016 | Katharina Gaus/Jeremie Rossy lab, University of New South Wales, Australia. Single Molecule Science Institute, EMBL Center of Excellence. Post-doc. Connection between the 3D microarchitecture of the endocytic matrix and the 2D nanoscale organization at T cell immunological synapse. | |
| Jan. 2010 - May 2015 | PhD Immunology. Marianne Boes lab, Utrecht University, the Netherlands. UMC Utrecht, Center of Translational Immunology. PhD candidate. Endosomal remodelling and reorganization that occur during/prior to activation of antigen-specific lymphocytes. | |
| Dec.2008 - June 2009 | Cox Terhorst laboratory, Harvard Medical School, USA. Immunology department at Beth Israel Deaconess Medical Center, Boston, USA. Remodelling of phagosomal bactericidal function in macrophages upon microbial- sensing by SLAM receptor proteins. | |
| Oct. 2007 - Nov. 2008 | Peter Rottier laboratory, University of Utrecht, the Netherlands. Virology department, veterinary sciences. Endosomal requirements for Spike protein-mediated Coronavirus entry. | |
| Sept. 2007 - Jan. 2010 | MSc Infection and Immunity. University of Utrecht, the Netherlands. Graduate School of Life Sciences | |
| Sept. 2004 - July 2007 | BSc Biomedical Sciences. University of Utrecht, the Netherlands. Eijkman school. | |

Professional activities

| Dec. 2023 - present | Review Editor Frontiers Cell and Dev Biol. | | |
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| Jan. 2022 - present | Bullying & Harrasment Advisor. Nuffield Department of Orthopaedics Rheumatology and Musculoskeletal Sciences. (https://www.ndorms.ox.ac.uk/files/for-staff/ndorms-bullying-and-harassment-policy-2022.pdf/@@download) | | |
| Dec. 2020 - present | Chair KIR postdoc committee. Kennedy Institute of Rheumatology, University of Oxford, United Kingdom. (https://www.kennedy.ox.ac.uk/about/working-at-the-kennedy/postdoctoral-life-at-the-kennedy) | | |
| Nov. 2020 - Dec 2023 | Chair young-NVVI (Dutch Society of Young Immunologists). yNVVI represents all ECRs within the NVVI, and will be their voice at the NVVI and EFIS. Focusing especially on sharing of expertise, mediation of collaborative science, career advancements, funding opportunities, and to stimulate ECRs involvement in public outreach. (https://vimeo.com/user39059939) | | |
| Oct. 2020 - present | Editor ecrLife. ecrLife is a place for early career researchers to share stories, ideas and experiences about their journey in science. https://ecrlife.org/getting-to-know-our-/ | | |
| March 2020 - present | Co-founder of COVID19 Oxford-Cardiff-Mt Sinay Preprint Initiative. Providing peer review and summaries of immunology focused COVID19 preprints so that everyone can stay updated with latest developments. https://www.immunology.ox.ac.uk/covid-19/covid-19-immunology-literature-reviews . | | |
| Dec. 2019 - present | Founding-Director and Treasurer of DANinUK Ltd in a collaboration with the Dutch embassy in London, UK. Aid provider for Dutch academics working at UK academic institutions, or Dutch academics moving from UK back to the Netherlands. | | |
| March 2019 - present | Graduate Studies Committee Kennedy Institute of Rheumatology, University of Oxford, United Kingdom. Oversees all graduate affairs and functions to advise and assist the development, implementation, and monitoring of all aspects of graduate studies. | | |
| March 2019 - present | eLife Ambassador Global program to advocate and build towards Open Science. Main focus on supervision/mentoring, funding, and implementation strategies. | | |
| Jan 2019 - present | Postdoc Committee Kennedy Institute of Rheumatology, University of Oxford, United Kingdom. Chair and organizer. | | |
| Sept 2018 - present | Journal Club Committee Kennedy Institute of Rheumatology, University of Oxford, United Kingdom. <i>Chair, organizer, and speaker.</i> | | |

| March 2013 - Dec. 2014 | ORPHEUS , Organisation for PhD Education in Biomedicine and Health Sciences in the European System. Associate Member of the European University Association - Council for Doctoral Education. Chair of "Quality of PhD education"-Lausanne and Creator of the Graz-declaration |
|---------------------------|--|
| March 2011 - July 2014 | PhD council Graduate School of Life Sciences (GSLS) at the University of Utrecht, the Netherlands. PhD program "Infection & Immunity" representative in the PhD council of GSLS, comprised of 15 different PhD programs. |
| Feb. 2008 - Dec. 2009 | Undergraduate Studies Committee for Immunology and Infection program at the University of Utrecht, the Netherlands. Representative of all students from Eijkman graduate school's Biomedical Masters in the educational committee. |

Professional experiences

| Teaching | | | |
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| 2021 – present | Immunology Tutor for Magdalen College, University of Oxford. (Biochemistry year 2 and 3 undergrad.) | | |
| 2019 – present | Oxford Immunology Teaching Network (Immunology year 4 undergrad.) | | |
| 2011-2012 | LTI – Introduction to Immunology (year 5-6 medical grad students). | | |
| Talks | | | |
| 2023 | Internal Institute Seminar. Kennedy Institute, University of Oxford, United Kingdom. | | |
| 2021 | WIMM Fri-AM talks, University of Oxford. online | | |
| 2020 | Infection and Immunity Institure of Research, University of Edinburgh, United Kingdom. | | |
| 2019 | Cutting edge research seminar. St Hughes College, University of Oxford, United Kingdom. Early Career Seminar. LMCB institute, University College London, United Kingdom. Internal Institute Seminar. Kennedy Institute, University of Oxford, United | | |
| | Kingdom. | | |
| 2018 | United Kingdom Extracellular Vesicles (UKEV) society meeting 2018. Sheffield, United Kingdom. European Conference of Immunology 2018. Amsterdam RAI, Amsterdam, the | | |
| 2016 | Netherlands. | | |
| 2016 | Single Molecule Science imaging conference. University of New South Wales, Sydney, Australia. | | |
| 2015 | Eijkman seminar. University Medical Center Utrecht, Utrecht, the Netherlands. Cardiovascular Research Center. SoMS, UNSW, Sydney. | | |

Organizer & chair

2021 Brexit problems for UK scince. DANinUK ltd, Ministry of Science, NL. Co-

organiser.

UK-NL cross-cultural differences. Dutch Embassy London, UK. Organiser.

2020 "Imaging extracellular vesicles biogenesis, release, and spread" at the ISEV,

Paris France. Online.

| 2018 | "Visualization of the immune response". European Conference of | | |
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| | Immunology. Amsterdam RAI, Amsterdam, the Netherlands. Chair | | |
| 2013 | Advanced Immunology "van Kinsbergen" course, aimed at second/third year | | |
| | PhD candidates; 20 participants. IJsselmeer, the Netherlands. Organizer | | |
| 2010 | Kleine Wetenschappers, Speuren naar Sporen. Universiteitsmuseum Utrecht. | | |

Outreach

2020 ESCRTing elderly to healthy old age. St Catherine's College. Univ. of Oxford.

Fatique research workshop with patient participation, organised by Versus

Arthritis and Kennedy Trust.

Organizer

2019 Magnificent Magnification. teaching school kids advanced microscopy

techniques that support my research. organizer, teacher.

2017 Curiosity Carnival. Organized by European Researchers' Night, Ashmolean

museum, and University of Oxford, Oxford, UK. speaker.

2014 Expeditie UU 2014, Pimp your mind. Organized by the Universiteitsmuseum

Utrecht, Studium Generale, and University of Utrecht.

2010 Kleine Wetenschappers, Speuren naar Sporen. Universiteitsmuseum Utrecht.

Editor & Peer-review

Editor Editor at ecrLife.

Review Editor Frontiers Cell and Dev. Biol.

Research topic editor at Frontiers in Cell and Developmental Biology;

Regulatory Mechanisms of Early Intracellular signaling in T lypmhocytes.

Grant proposals Wellcome Strategic Fund (WISSF)

Manuscripts EMBO, Nature Communications, Frontiers Cell and Dev Biol, Viruses, Journal

of Medical Microbiology and Immunology, Biomedicine, Biology, Molecules,

and IJMS.

Together with supervisor Prof. M.L. Dustin, manuscripts for Nature Immunology, Science Translational Medicine, and Nature Communications.

Professional memberships

2019 British Society of Cell Biology (BSCB)

The International Society of Extracellular Vesicles (ISEV)

DANinUK Ltd. eLife Ambassador

2014 Organisation for PhD Education in Biomedicine and Health Sciences in the

European System (ORPHEUS).

2008 Dutch Society for Immunology (NVVI).

Supervision

Oct 2021 – 2022 Daily Supervision of master student Paulina Dirvanskyte (Hertford College,

Univ. of Oxford).

July 2021 – present Joint supervisor of DPhil student Olga Margaritaki (Harkiolaki lab, Univ. of

Oxford)

Dec. 2018 - 2021 Co-supervisor of DPhil student Charles Coomer (Padilla lab, Univ. Oxford)

Sept. 2018 - Mar. 2019 Daily supervision of master student Simone Brokamp (Univ. Leiden)

Mar. 2018 - Sept. 2018 Daily supervision of PhD candidate Chiara Cassioli (Univ. Sienna)

Oct. 2012 - July 2013 Daily supervision of master student Mirjam Hoekstra (Univ. Utrecht)

Dec. 2011 - Sept. 2012 Daily supervisor of master student Susanne van der Grein (Univ. Utrecht)

Funding

| 2022 | Diamond Light Source | , Harwell (proposal BI30452). |
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| 2022 | Diamiona Eight Source | , i iai wen (proposai bise ise). |

2020 John Fell Fund

2018 co-applicant of R01 NIH grant

2013 WKZ fund R1812.

2008 Grant of Dutch Digestive Foundation .

2008 Travel grant Trajectum.

2008 Grant of Dutch Kidney Foundation.

<u>Awards</u>

2012 Immunotools award.

2011 cover of Annual Dutch Immunology Society meeting

Advisory roles

March 2022 – present Aluda Pharmaceuticals, Inc. California, USA. Nov. 2019 Linseg Tech, Granby, Quebec, Canada

Mar. 2019 - present PhD committee of Alice Robinson (Monaco lab, Univ. Oxford)

Sept. 2018 - present Assessor of PhD transfer viva of Charles Coomer (Padilla lab, Univ. Oxford)

Dec. 2017 - present PhD committee of Anna Marzeda (Midwood lab, Univ. Oxford)

Scientific Publications

26 publications of which I wrote and revised seven as first author, 1 editorial, and 1 as senior author. Cited a total of 1222 times, H-index 18.

2023

Zec K, Schonfeldova B, Ai Z, van Grinsven E, Pirgova G, Eames HL, Berthold DL, Attar M, <u>Compeer EB</u>, Arnon TI, and Udalova IA. Macrophages in the synovial lining niche initiate neutrophil recruitment and articular inflammation. **Journal of Experimental Medicine** 2023 March 14.

Yazicioglu YF, Marin EM, Galiani S, <u>Compeer EB</u>, Sandhu C, Attar M, Dunachie S, Kronsteiner B, Dustin ML, and Clarke A.

Dynamic mitochondrial transcription and translation in B cells control germinal centre entry and lymphomagenesis. **Nature Immunology** 2023 March 7

2022

Kent BA, Holman C, Amoako E, Antonietti A, Azam JM, Ballhausen H, Chen Y, Compeer EB, Puebla I, de Winde CM, Zaza C, Weissgerber TL. Recommendations for empowering early career researchers to improve research culture and practice. PLoS Biology 2022 July 7;20(7)

2021

Verweij FJ, Balaj L, Boulanger C, Carter DRF, <u>Compeer EB</u>, D'Angelo G, El Andaloussi S, Goetz JG, Gross JC, Hyenne V, Krämer-Albers E, Lai CP, Loyer X, Marki A, Momma S, Nolte-'t Hoen ENM, Pegtel MD, Peinado H, Raposo G, Rilla K, Tahara H, Théry C, van Royen ME, Vandenbroecke R, Wehman AM, Witwer K, Wu Z, Wubbolts R, van Niel G. <u>The power of imaging to understand extracellular vesicle biology in vivo</u>. **Nature Methods** 2021 18, 1013–1026.

Cassioli C, Balint S, <u>Compeer EB</u>, Felce JH, Gamberucci A, Bella CD, Ling-Felce S, Brunetti J, Valvo S, Pende D, D'Elios MM, Moretta L, Dustin ML* and Baldari CT*. Increasing LFA-1 expression enhances immune synapse architecture and T cell receptor signaling in Jurkat E6.1 cells. **Frontiers in Cell and Dev Biol.** 2021 Jul 23;9:673446.

Cassioli C, Onnis A, Finetti F, Capitani N, Brunetti J, <u>Compeer EB</u>, Niederlova V, Stepanek O, Dustin ML, Baldari CT. The Bardet-Biedl Syndrome complex component BBS1 controls T cell polarity during immune synapse assembly. **Journal of Cell Science** 2021 Aug 15;134(16).

Aguado E, <u>Compeer EB</u>, Miazek A. **Editorial:** Regulatory Mechanisms of Early Intracellular Signaling in T lymphocytes. **Frontiers Cell and Developmental Biology** 2021 Apr 9;9:676949

2020

Hanna SJ, Codd AS, Gea-Mallorqui E, Scourfield DO, Richter FC, Ladell K, Borsa M, Compeer EB, Moon OR, Galloway SAE, Dimonte S, Capitani L, R Shepherd FR, Wilson JD, Uhl LFK, The Oxford-Cardiff COVID-19 Literature Consortium, Gallimore AM and Milicic A. T cell phenotype in COVID-19 **Oxford Open Immunology** 2020. (Living review till 2022)

Coomer CA, Carlon-Andres I, Iliopoulou M, Dustin ML, <u>Compeer EB*</u>, Compton AA*, Padilla-Parra S*. <u>Single-cell glycolytic activity regulates membrane tension 1 and HIV-1 fusion</u>. **Plos Pathogens** 2020. Feb 21. >>senior authorship<<

2019

Saliba DG*, Céspedes PF*, Bálint S*, <u>Compeer EB</u>, Valvo S, Korobchevskaya K, Mayya V, Peng Y, Dong T, Tognoli ML, O'Neill E, Bonham S, Fischer R, Kessler BM, Dustin ML. **eLife** 2019. *Aug 30;8. pii: e47528. doi: 10.7554/eLife.47528.* (*equal authorship contribution)

Compeer EB. Innovatie van het peer-review system. New Scientist, 72;78-79. (not peer-reviewed)

2018

Newton RH, Shrestha S, Sullivan JM, Yates KB, <u>Compeer EB</u>, Ron-Harel N, Blazar BR, Bensinger SJ, Haining WN, Dustin ML, Campbell DJ, Chi H, Turka LA. **Nat. Immunol.** 2018. *Aug;19(8):838-848*.

<u>Compeer EB</u>, Kraus F, Ecker M, Redpath G, Amiezer M, Rother N, Nicovich P, Kapoor-Kaushik N, Deng Q, Samson G, Yang Z, Lou J, Carnell M, Vartoukian H, Gaus K, Rossy J. A mobile endocytic network connects clathrin-independent receptor endocytosis to recycling and promotes T cell activation. Nat. Comm. 2018 *Apr 23;9(1):1597*.

2016

Kapoor-Kaushik N, Hinde E, <u>Compeer EB</u>, Yamamoto Y, Kraus F, Yang Z, Lou J, Pageon SV, Tabarin T, Gaus K, Rossy J. Distinct mechanisms regulate Lck spatial organization in activated T cells. **Front. Immunol.** 2016 *Mar 8;7;83*.

2015

Compeer EB, Janssen W, van Royen-Kerkhof A, van Gijn M, van Montfrans JM, Boes M. Dysfunctional BLK in Common Variable Immunodeficiency perturbs B cell proliferation and ability to elicit antigen-specific CD4⁺ T cell help. **Oncotarget** 2015 *Mar* 14;5.

2014

<u>Compeer EB</u> and Boes M. MICAL-L1-related and unrelated mechanisms underlying elongated tubular endosomal network (ETEN) in human dendritic cells. **Commun Integr Biol**. 2014 *Dec 23;7(6)*.

Audia S, Rossato M, Santegoets K, Spijkers S, Wichers C, Bekker C, Bloem A, Boon L, Flinsenberg T, Compeer E, van den Broek T, Facy O, Ortega-Deballon P, Berthier S, Leguy-Seguin V, Martin L, Ciudad M, Samson M, Trad M, Lorcerie B, Janikashvili N, Saas P, Bonnotte B, Radstake TR. Splenic TFH expansion participates in B-cell differentiation and antiplatelet-antibody production during immune thrombocytopenia. **Blood**. 2014 *Oct* 30;124(18):2858-66.

<u>Compeer EB</u>. Primary Immunodeficiency: Out of the bubble, helping patients in the open. **Immuun**. 2014 *Oct 1;3(2):30*.

van der Burgh R, Nijhuis L, Pervolaraki K, <u>Compeer EB</u>, Jongeneel LH, van Gijn M, Coffer PJ, Murphy MP, Mastroberardino PG, Frenkel J, Boes M. Defects in mitochondrial clearance predispose human monocytes to interleukin-1β hyper-secretion. **J Biol Chem.** 2014 *Feb 21;289(8):5000-12*.

<u>Compeer EB</u>, Flinsenberg TW, Boon L, Hoekstra ME, Boes M. Tubulation of endosomal structures in human dendritic cells by Toll-like receptor ligation and lymphocyte contact accompanies antigen cross-presentation. **J Biol Chem.** 2014 *Jan 3;289(1):520-8*.

2012

Flinsenberg TW, <u>Compeer EB</u>, Koning D, Klein M, Amelung FJ, van Baarle D, Boelens JJ, Boes M. Fcy receptor antigen targeting potentiates cross-presentation by human blood and lymphoid tissue BDCA-3+ dendritic cells. **Blood**. 2012 Dec 20;120(26):5163-72.

<u>Compeer EB</u>, Flinsenberg TW, van der Grein SG, Boes M. Antigen processing and remodeling of the endosomal pathway: requirements for antigen cross-presentation. **Front. Immunol.** 2012;3:37

van de Ven AA, <u>Compeer EB</u>, Bloem AC, van de Corput L, van Gijn M, van Montfrans JM, Boes M. Defective calcium signaling and disrupted CD20-B-cell receptor dissociation in patients with common variable immunodeficiency disorders. **J Allergy Clin Immunol**. 2012 Mar;129(3):755-761.e7

2011

Flinsenberg TW, <u>Compeer EB</u>, Boelens JJ, Boes M. Antigen cross-presentation: extending recent laboratory findings to therapeutic intervention. Clin Exp Immunol. 2011 Jul;165(1):8-18.

van de Ven AA, <u>Compeer EB</u>, van Montfrans JM, Boes M. B-cell defects in common variable immunodeficiency: BCR signaling, protein clustering and hardwired gene mutations. **Crit Rev Immunol**. 2011;31(2):85-98.

2010

Berger SB, Romero X, Ma C, Wang G, Faubion WA, Liao G, <u>Compeer E</u>, Keszei M, Rameh L, Wang N, Boes M, Regueiro JR, Reinecker HC, Terhorst C. SLAM is a microbial sensor that regulates bacterial phagosome functions in macrophages. **Nat Immunol.** 2010 Oct;11(10):920-7.