



Curriculum Vitae

Personal information **Maja Sommerfelt Grønvold**

Work experience

1. Employer: Norwegian Medical Products Agency (Previously Norwegian Medicines Agency)
 - Start date: March 2018
 - End date:
 - Position: Senior Adviser
 - Activities: Clinical assessor
 - Country: Norway
2. Employer: Sommerfelt Scientific Consulting
 - Start date: December 2017
 - End date: February 2018
 - Position: Consultant
 - Activities: Sole proprietorship _ No longer active Activities: Translation (Norwegian to English). Clinical study manuscript writing
 - Country: Norway
3. Employer: Bionor Pharma AS
 - Start date: September 2002
 - End date: November 2017
 - Position: Chief Scientific Officer
 - Activities: Research and development of peptide_based therapeutic vaccines for infectious diseases including HIV and a universal influenza vaccine. Preclinical research, toxicology studies with contract research organisations, and liaising with Central laboratories (immunology, virology) regarding clinical trials. Preparing documents for regulatory authorities. Applications for ethical approvals for preclinical research, registering data from clinical trials on the portal www.clinicaltrials.gov. Co_ordination of research projects funded by the Research Council of Norway with both national and international partners. Applications to the Research Council of Norway, received funding from programmes BIA, FUGE and GLOBVAC. Manuscript writing for publication in peer reviewed journals. Teaching at the University of Bø (2004 _ 2006) as well as seminars, lectures, presentations at conferences, meetings and schools.
 - Country: Norway
4. Employer: University of Bergen
 - Start date: May 1997
 - End date: September 2002
 - Position: Professor
 - Activities: Supervision of students, teaching virology, immunology and vaccines to both medical students and non_medical students, research on retroviruses such as HIV, the endogenous retrovirus of langur monkeys with emphasis on virus evolution and zoonosis, using cell and molecular biology techniques and bioinformatics. Also researched receptors for maedi_visna virus of sheep . External examiner for a number of doctoral candidates.
 - Country: Norway
5. Employer: University of Bergen
 - Start date: December 1994
 - End date: April 1997
 - Position: Associate Professor
 - Activities: Supervision of students, teaching virology, immunology and vaccines to both medical students and non_medical students, research on retroviruses such as HIV, the endogenous retrovirus of langur monkeys with emphasis on virus evolution and zoonosis, using cell and molecular biology techniques and bioinformatics
 - Country: Norway
6. Employer: University of Bergen
 - Start date: December 1992
 - End date: November 1994
 - Position: Post_doctoral Research Scientist
 - Activities: Research on HIV using cell and molecular biological techniques. Teaching virology to medical student and non_medical students.
 - Country: Norway
7. Employer: University of Alabama at Birmingham
 - Start date: February 1989
 - End date: November 1992
 - Position: Post_doctoral research scientist
 - Activities: Retrovirus assembly using molecular biology; techniques such as cloning, DNA sequencing, mutagenesis, use of viral vectors, baculovirus system.
 - Country: United States
8. Employer: Institute of Cancer Research
 - Start date: April 1998
 - End date: January 1989
 - Position: Post_doctoral Research Scientist
 - Activities: Cell biology, virus propagation, isolation, purification. Development of pseudotype viruses by phenotypic mixing. Culturing human (Human T_cell leukaemia virus, HTLV-I) and animal retroviruses. Use of somatic cell hybrids.
 - Country: United Kingdom

Education and training

1. Subject: Institute of Cancer Research
 - Start date: October 1984
 - End date: April 1988
 - Qualification: PhD
 - Organisation: Virological techniques, generation of monoclonal antibodies, cell culture,. Studies of retroviral receptors on human cells, Retroviral receptor assignment to human chromosome using somatic cell hybrids
 - Country: United Kingdom
2. Subject: University College London (University of London)
 - Start date: October 1981
 - End date: June 1984
 - Qualification: BSc Hons
 - Organisation: Degree in Microbiology (bacteriology, virology, protozoa, fungi), with emphasis on Medical Microbiology, courses on immunology, cell biology and industrial microbiology, antibiotics.
 - Country: United Kingdom

Additional information

Publications

Publications in international journals (Sommerfelt as surname)

- Ali S, Camarero J, van Hennik P, Bolstad B, **Sommerfelt Grønvoid** M, Syvertsen C, Strøm BO, Ökvist M, Josephson P, Keller_Stanislawski B, Zafiroopoulos N, Pean E, Bergh J, da Rocha Dias S, Pignatti F. (2020) European Medicines Agency extension of indication to include the combination immunotherapy cancer drug treatment with nivolumab (Opdivo) and ipilimumab (Yervoy) for adults with intermediate/poor_risk advanced real cell carcinoma. *ESMO Open*; 5:e000798. doi 10.1136/esmopen_2020_000798.
- Rockstroh JK, Asmuth D, Pantaleo G, Clotet B, Podzamczar D, van Lunzen J, Arastéh K, Mitsuyasu R, Peters B, Silvia N, Jolliffe D, Ökvist M, Krogsgaard K, **Sommerfelt MA**. (2019). Re_boost immunizations with the peptide_based therapeutic HIV vaccine, Vacc_4x, restores geometric mean viral load set_point during treatment interruption. *PLoS ONE* 14(1): e0210965. <https://doi.org/10.1371/journal.pone.0210965>
- Jørgensen S, Leth S, **Sommerfelt M**, Østergaard L, Tolstrup M, Søgaard OS. (2018). Differences in antiretroviral regimens do not impact safety or level of latency reversal in persons receiving romidepsin *AIDS* 32(12):1729_1731
- Huang Y, Zhang L, Jolliffe D, Sanchez B, Stjernholm G, Jelmert Ø, Ökvist M, **Sommerfelt MA**. (2018). Post_vaccination C_reactive protein (CRP) and C5/gp41732_744 antibody level fold_changes over baseline are independent predictors of therapeutic HIV vaccine effect in a phase 2 clinical study of Vacc_4x. *AIDS Res. & Hum. Retroviruses*. Mar;34(3):307-313. doi: 10.1089/AID.2017.0179.
- Herrera_Rodríguez J, Meijerhof T, Niesters HG, Stjernholm G, Hovden A_O, Sørensen B, Ökvist M, **Sommerfelt MA**, Huckriede A. (2018). A novel peptide_based vaccine candidate with protective efficacy against influenza A in a mouse model. *Virology* 515:21_28.
- Huang Y, Pantaleo G, Tapia G, Sanchez B, Zhang L, Trondsen M, Hovden AO, Pollard R, Rockstroh J, Ökvist M, **Sommerfelt MA**. (2017). Cell_Mediated Immune Predictors of Vaccine Effect on Viral Load and CD4 Count in a Phase 2 Therapeutic HIV-1 Vaccine Clinical Trial. *EbioMedicine* 24:195_204.
- Tapia G, Højen JF, Ökvist M, Olesen R, Leth S, Nissen SK, VanBelzen DJ, O'Doherty U, Mørk A, Krogsgaard K, Søgaard OS, Østergaard L, Tolstrup M, Pantaleo G, **Sommerfelt MA**. (2017). Sequential Vacc_4x and romidepsin during combination antiretroviral therapy (cART): Immune responses to Vacc_4x regions on p24 and changes in HIV reservoirs. *J. Infect.* 75: 555_571.
- Brekke K, **Sommerfelt M**, Ökvist M, Dyrhol_Riise AM, Kvale D. (2017). The therapeutic HIV Env C5/gp41 vaccine candidate, Vacc_C5 induces specific T_cell regulation in a phase I/II clinical study. *BMC Infect Dis.* 17(1):228.
- Sørensen B, **Sommerfelt MA**, Stjernholm G, Smith PL, Ökvist M, Hovden AO, Hoddevik G, Redfield R, Ustina V, Jelmert Ø, Zeldis J, Dalgleish A. (2017). Correlation of antibody responses to a peptide antigen gp120_C5501_512/gp41732_744 with HIV disease progression. *AIDS Res. & Hum. Retroviruses.* 33(6):558_566.
- Smith PL, Norgate KJ, Hegarty E, Grageda N, Heelas E, **Sommerfelt M**, Lange T, Hovden AO, Sørensen B, Dalgleish A, Bodman_Smith M. (2017). Effect of modification of p24 peptide antigen on dendritic cell uptake and T_cell activation. *Curr HIV Res.* 15(1):3_14.
- Leth S, Schleimann MH, Nissen SK, Højen JF, Olesen R, Graversen ME, Jørgensen S, Kjær AS, Denton PW, VanBelzen DJ, Mørk A, **Sommerfelt MA**, Krogsgaard K, Østergaard L, Rasmussen TA, Tolstrup M, Søgaard OS. (2016). The combined effect of Vacc_4x/rhuGM_CSF vaccination and romidepsin on the HIV_1 reservoir: a phase Ib/IIa, single group, clinical trial. *Lancet HIV* 3:e463_e472.
- Huang, Y., Zhang, L., Jolliffe D., Hovden AO., Ökvist, M., Pantaleo, G., **Sommerfelt MA**. (2016). A Case for preART_Adjusted Endpoints in HIV Therapeutic Vaccine Trials. *Vaccine* 34:1282_1288.
- Søgaard OS, Graversen ME, Leth S, Olesen R, Brinkmann CR, Nissen SK, Kjaer AS, Schleimann MH, Denton PW, Hey_Cunningham WJ, Koelsch KK, Pantaleo G, Krogsgaard K, **Sommerfelt M**, Fromentin R, Chomont N, Rasmussen TA, Østergaard L, Tolstrup M. (2015) The Depsipeptide Romidepsin Reverses HIV_1 Latency In Vivo. *PLoS Pathog.* Sept. 17;11(9):e1005142.
- Brekke K, Lind A, Holm_Hansen C, Haugen IL, Sørensen B, **Sommerfelt M**, Kvale D (2014). Intranasal administration of a therapeutic HIV vaccine (Vacc_4x) induces dose_dependent systemic and mucosal immune responses in a randomized controlled trial. *PLoS One.* Nov 14;9(11):e112556.
- Kran A_M B, Lind A, **Sommerfelt MA**, Baksaas I, Sørensen B, Kvale D. (2014). Comparable cellular immune responses in patients with and without antiretroviral treatment after immunization with HIV_1 p24, p17 and Tat consensus peptides (Vacc_5q). *J AIDS Clin Res* 5: 296. doi:10.4172/2155_6113.1000296
- Pollard RB, Rockstroh JK, Pantaleo G, Asmuth DM, Peters B, Lazzarin A, Garcia F, Ellefsen K, Podzamczar D, van Lunzen J, Arastéh K, Schürmann D, Clotet B, Hardy WD, Mitsuyasu R, Moyle G, Plettenberg A, Fisher M, Fätkenheuer G, Fischl M, Taiwo B, Baksaas I, Jolliffe D, Persson S, Jelmert O, Hovden AO, **Sommerfelt MA**, Wendel_Hansen V, Sørensen B. (2014). Safety and efficacy of the peptide_based therapeutic vaccine for HIV_1, Vacc_4x: a phase 2 randomised, double_blind, placebo_controlled trial. *Lancet Infectious Diseases* 14(4):291_300.
- Lind A, Brekke K, **Sommerfelt MA**, Holmberg JO, Aass HCD, Baksaas I, Sørensen B, Dyrhol_Riise AM, Kvale D. (2013). Boosters of a therapeutic HIV_1 vaccine (Vacc_4x) induce divergent polyfunctional CD8+ T cell responses related to regulatory mechanisms. *Vaccine* 31(41):4611_8.
- Kran A_MB, **Sommerfelt MA**, Baksaas I, Sørensen B, Kvale D. (2012). Delayed_type hypersensitivity (DTH) responses to HIV Gag p24 relate to clinical outcome after peptide_based therapeutic immunization for chronic HIV infection. *APMIS.* 2012 120(3):204_9.

Lind A, **Sommerfelt MA**, Holmberg JO, Baksaas I, Sørensen B, Kvale D. (2012). Short Communication: Intradermal Vaccination of HIV_infected Patients with Short HIV Gag p24_like Peptides Induces CD4+ and CD8+ T cell Responses Lasting more than 7 Years. *Scand. J. Inf. Dis.* 44(8):566_72

Sommerfelt MA (2011). T-cell-mediated and humoral approaches to universal influenza vaccines. *Expert Review of Vaccines* 10(10): 1359_61.

Kran A_MB, Jonassen TØ, **Sommerfelt MA**, Løvgården L, Sørensen B, Kvale D. (2010). Low frequency of amino acid alterations following therapeutic immunization with HIV_1 Gag p24_like peptides. *AIDS* 24(17): 2609_18.

Sommerfelt MA. (2009). Patent evaluation. 'Circular CCR5 peptide conjugates and uses thereof. WO2008074895'. *Expert Opinion on Therapeutic Patents.* 19:1323_8.

Sommerfelt MA and Sørensen B (2008). Prospects for HIV-1 therapeutic immunisation and vaccination: the potential contribution of peptide immunogens. *Expert Opin Biol Ther* 8(6):745_57.

Nyhus JN, Kran A_MB, **Sommerfelt MA**, Baksaas I, Sørensen B, Kvale D. (2006). Multiple antigen concentrations in delayed_type hypersensitivity (DTH) and response diversity during and after immunization with a peptide_based HIV_1 immunotherapy candidate Vacc_4x. *Vaccine* 24:1543_50

Kran A_MB, Sørensen B, **Sommerfelt MA**, Nyhus JN, Baksaas I, Kvale D. (2006). Long_term HIV_specific responses and delayed resumption of antiretroviral therapy after peptide immunization targeting dendritic cells. *AIDS* 20:627_630.

Kvale D, Kran A_MB, **Sommerfelt MA**, Nyhus J, Baksaas I, Bruun JN, Sørensen B. (2005). Divergent in vitro and in vivo correlates of HIV_specific T_cell responses during onset of HIV viraemia. *AIDS.* 19(6):563_7.

Kran A_MB, **Sommerfelt MA**, Sørensen B, Nyhus J, Baksaas I, Bruun JN, Kvale D. (2005). Reduced viral burden amongst high responder patients following HIV_1 p24 peptide_based therapeutic immunization. *Vaccine.* 23:4011_4015.

Nyhus JN, **Sommerfelt MA**, Sørensen B. (2005). HIV_immunterapi: Et viktig supplement til dagens HIV_medisiner. *Genialt Nr. 2 Bioteknologinemda pp18_20.*

Sommerfelt MA, Ohlsson I, Flolid I, Thorstenson R, Sørensen B. (2004). A Simple Semi-rapid HIV 1&2 Confirmatory Immunoassay Using Magnetic Particles. *J. Virological Methods.* 115(2): 191_198.

Sommerfelt MA, Nyhus J, Sørensen B. (2004). Novel peptide_based HIV_1 immunotherapy. *Expert Opin. Biol. Ther.* 4(3): 349_361.

Kran A_MB, Sørensen B, Nyhus J, **Sommerfelt MA**, Baksaas I, Kvale D. (2004). Dose and HLA_dependent Immunogenicity of a Peptide_Based HIV_1 Immunotherapy Candidate (Vacc_4x). *AIDS* 18(14):1875_83.

Nyhus J, **Sommerfelt MA**, Sørensen B. (2003). Peptide from Tat basic domain shows striking similarity to a region of human T_cell transcription factor (TCF)_1. (Letter). *AIDS Res. & Hum. Retroviruses* 19 (4) pp 345_346.

Curlee KV, Hong JS, Clancy JP, Hunter E, Berdiev B, Benos D, **Sommerfelt MA**, Sorscher EJ, Sakailian M. (2003). Membrane transplantation corrects integral membrane protein defects. *J. Mol. Med.* 81:511_520.

Sommerfelt MA, Harkestad N, Hunter E. (2003). The endogenous langur retrovirus PO_1_Lu and its exogenous counterparts in macaque and langur monkeys. *Virology* 315(2): 275_282.

Hovden AO, **Sommerfelt MA**. (2002). The influence of CXCR4 and CD4 on maedi visna virus_induced syncytium formation. *APMIS* 110:697_708

Kiwelu I, Nakkestad HL, Shao J, **Sommerfelt MA**. (2000). Evidence of subtype B_like sequences in the V3 loop region of human immunodeficiency virus type 1 from Kilimanjaro, Tanzania. *AIDS Res. & Hum. Retroviruses.* 16 (12): 1191_1195.

Nilsen MV, Åsjø B, **Sommerfelt MA**. (1999). 'Transient Tat activation of the HIVLAV/Lai_1 LTR by primary HIV_1 phenotypic variants in HeLaT4LTRBeta_gal cells'. *APMIS* 107:485_92.

Sommerfelt MA. (1999). Retrovirus Receptors. *J. Gen Virol.*80:3049_3064.

Sorscher ES, **Sommerfelt MA**. (1995). One_step affinity purification of recombinant protein derived from the baculovirus expression system. *Methods Mol Biol.* 39:337_348.

Sommerfelt MA, Åsjø B. (1995). Intercellular adhesion molecule 3, a candidate Human immunodeficiency virus type 1 co_receptor on lymphoid and monocytoid cells. *J. Gen Virol.* 76:1345_1352.

Sommerfelt MA, Sorscher ES. (1994). Use of fluorescence_activated cell sorting for rapid isolation of insect cells harboring recombinant baculovirus. *Methods Cell Biology.* 42:563_574.

Sommerfelt MA, Roberts CR, Hunter E. (1993). Expression of simian type D retroviral (Mason_Pfizer monkey virus) capsids in insect cells using recombinant baculovirus. *Virology* 192: 298_306.

Peng S, **Sommerfelt MA**, Logan J, Huang Z, Jilling T, Kirk K, Hunter E, Sorscher EJ. (1993). One step affinity purification of recombinant protein using the baculovirus/insect cell expression system. *Protein expression and purification* 4:95_100

Brody BA, Rhee SS, **Sommerfelt MA**, Hunter E. (1992). A viral protease_mediated cleavage of the TM protein of M_PMV can be modified by mutations within the MA protein. *Proc. Natl. Acad. Sci. U.S.A.* 89:3443_3447.

Sommerfelt MA, Petteway SR Jr., Dreyer GB, Hunter E. (1992). The effect of retroviral proteinase inhibitors on Mason_Pfizer monkey virus maturation and transmembrane glycoprotein cleavage. *J. Virol.* 66:4220_4227.

Sommerfelt MA, Rhee SS, Hunter E. (1992). Importance of p12 protein in Mason Pfizer monkey virus assembly and infectivity. *J. Virol.* 66:7005_7011.

Sommerfelt MA, Weiss RA. (1990). Receptor interference of 20 retroviruses plating on human cells. *Virology* 176:58_69.

McClure MO, **Sommerfelt MA**, Marsh M, Weiss RA. (1990). On the pH dependence of mammalian retrovirus infection. *J. Gen Virol.* 71:767_773.

Sommerfelt MA, Williams BP, Goodfellow PN, McKnight A, Weiss RA. (1990). Localization of the receptor gene for type D simian retroviruses on human chromosome 19. *J. Virol.* 64:6214_6220.

Sommerfelt MA, Marsh M. (1989). Binding and Entry of Animal Viruses. *Advanced Drug Delivery Systems* 4:1_26.

Brahm J, McClure MO, **Sommerfelt MA**, Exley M, Weiss RA, Fagan EA, Williams R. (1988). Lack of reverse transcriptase activity in serum in sporadic post_transfusional and presumed epidemic or water_borne forms of severe non_A, non_B Hepatitis. *J. Med. Virol.* 25:157_164.

Sommerfelt MA, Williams BP, Clapham PR, Solomon E, Goodfellow PN, Weiss RA. (1988). Human T₄ cell leukaemia viruses types 1 and 2 utilise a common receptor encoded by human chromosome 17. *Science* 242:1557_1559.

Chapters in Books:

Sommerfelt MA. (2011). Towards a functional cure for HIV infection: The potential contribution of therapeutic vaccination. In: *Recent Translational Research in HIV/AIDS* Ed. Dr. Yi_Wei Tang. ISBN 979_953_307_189_2. pp 493_510. DOI: 10.5772/21058

Sommerfelt MA, Hunter E. (1999). Retroviruses_ Type D (Retroviridae) In: *Encyclopedia of Virology, Second Edition*. pp1518_1526. Publ. Academic Press. Eds. Robert Webster and Alan Granoff. Sommerfelt MA, Hunter E. (1997). Principles of retrovirus assembly. In: *Principles of Medical Biology, Volume 9B Microbiology*. pp351_360. Publ. J.A.I. Press. Inc. Greenwich Connecticut. Eds. E.E. Bittar and N. Bittar.

Sommerfelt Grønvoid MA. (1997). Forbedring av virologiundervisning til medisinske studenter ved Universitetet i Bergen. Universitetspedagogisk utviklingsarbeid i Bergen. Bidrag fra deltakerne i Utviklingsprogram i Universitetspedagogikk, Kull 10. UPED_ skrift nr. 2/97. Redaktør, Arild Gulbrandsen. pp 33_42. Publ. Bergen Print Service AS. ISBN: 0805_2557.

Sorscher ES, **Sommerfelt MA**. (1995). One_step affinity purification of recombinant protein derived from the baculovirus expression system. In: *Baculovirus Expression Protocols*. Ed. C. Richardson. Humana Press. New York. pp337_348

Braun J, Gras G, Chapuis F, **Sommerfelt MA**, Clapham P, Weiss RA, Åsjø B, Gluckman JC, Dormont D, Barre_Sinoussi F. (1995). Analysis of cell surface antigens involved in HIV_1 cell to cell fusion. In: *Leukocyte Typing V. Workshop Session T06*. Publ. Oxford University Press, Oxford. Eds. S. Schlossman et al. Vol. 1. pp465_468.

Sommerfelt MA, Rhee SS, Hunter E. (1994). Type D retroviruses. In: *Encyclopedia of Virology*. Eds: R.G. Webster, A. Granoff. Publ. Academic Press. pp1236_1242.

Weiss RA, **Sommerfelt MA**, McClure MO, Clapham PR, Weber J. (1989). In: 'Cell Biology of Virus Entry, Replication and Pathogenesis' UCLA Symposia on Molecular and Cellular Biology, New Series vol 90 held in Taos, February 1988. pp67_74. Eds: Richard Compans, Ari Helenius and Michael Oldstone. Publ. Alan Liss Inc. NY.

Sommerfelt MA, Weiss RA. (1989). Retrovirus receptors and cell tropism. In: *Concepts in Viral pathogenesis. III*. Eds. A.L. Notkins and M.B.A. Oldstone. Publ. Springer_Verlag. pp99_105.

Sommerfelt MA, Weiss RA. (1989). Retroviral receptors and interference on human cells. In: *Vectors as tools for the study of normal and abnormal growth and differentiation. NATO ASI series H: Cell Biology, Vol 34*. pp141_152.

Projects

2014_2016 Norwegian Research Council GLOBVAC programme. REDUC clinical study

2013_2016 Norwegian Research Council GLOBVAC Vacc_HIV (combination of two therapeutic HIV vaccine candidates)

2012_2017 Norwegian Research Council GLOBVAC programme. HIV clinical study where participants from an earlier clinical trial of Vacc_4x were given reboost immunization with the same candidate.

2009_2011 Norwegian Research Council GLOBVAC programme. Continuation of a large HIV phase IIB_TOC clinical study. 2008_11 Norwegian Research Council (PI) BIA programme. Studied HIV chronic immune stimulation with a peptide_based therapeutic HIV candidate, Vacc_C5.

2008 Norwegian Research Council (PI) GLOBVAC programme. Initiation of an HIV phase IIB_TOC study of Vacc_4x.

2006_9 Norwegian Research Council. FUGE programme. Preclinical studies on a universal influenza preventative vaccine candidate.

2006_9 Norwegian Research Council (Co_I) GLOBVAC programme. Partner in an investigator initiated clinical study of Vacc_4x (nasal administration).

2005_8 Norwegian Research Council (PI) BIA programme. Research to support peptide design platform.

2003_4 Doris Duke Foundation collaborated on a Project to develop a rapid HIV test 2000 Norwegian Cancer Society to Research entry of human T₄ cell leukaemia virus in human cells.

1998_9 Norwegian Research Council. Research on HIV entry

1997_8 L. Meltzer Høyskolefond. Collaborated on a Project researching virus_cell interactions & pathogenesis

1996: Norwegian Research Council Research on HIV entry mechanisms

1996: Norwegian Cancer Society. Research on HIV entry mechanisms

1996 L. Meltzer Høyskolefond. Collaborated on a Project researching virus_cell interactions & pathogenesis.

Memberships

Other Relevant Information

Chair of the Infectious Diseases Working Party (IDWP): May 2025 - present

Member of the Vaccines Working Party (VWP): April 2024 - present

Member of Emergency Task Force (ETF): July 2023 - present

Vice Chair of the Infectious Diseases Working Party (IDWP): May 2022 - May 2025

Alternate Member of Committee for Advanced Therapies (CAT): January 2019 - June 2022

Observer at ETF: July 2022 - June 2023