Fraser Hof

Department of Chemistry | Office of Vice-President Research and Innovation | University of Victoria

POSITIONS AT UVIC

Period	Title	Unit
2022–present	Associate Vice-President Research	OVPRI
2024 (3 months)	Interim Vice-President Research and Innovation	OVPRI
2020–2022	Acting Director/Director	Centre for Advanced Materials (CAMTEC)
2019–2020	Associate Director	Centre for Advanced Materials (CAMTEC)
2016–present	Professor	Department of Chemistry
2011–2016	Associate Professor	Department of Chemistry
2005–2011	Assistant Professor	Department of Chemistry

EDUCATION

Time	Degree/Training	Institution
2003–2005	Post-doctoral fellow (Medicinal Chemistry)	ETH Zürich, Switzerland
1998–2003	Ph.D. (Organic Chemistry)	The Scripps Research Institute, La Jolla, USA
1993–1998	B.Sc. Hon. (Chemistry)	University of Alberta

HONOURS

2022	REACH Award for Excellence in Graduate Student Supervision and Mentorship, UVic
2018	Faculty of Science Research Excellence Award, UVic
2017	Intellisyn Pharma Research Excellence Award, Canadian Society for Chemistry (*National award for Distinguished Contribution to Medicinally Relevant Chemistry*)
2016–2021	Tier 2 Canada Research Chair in supramolecular and medicinal chemistry
2016	Royal Netherlands Academy of Arts and Sciences (KNAW) Visiting Professorship
2015	Royal Society of Chemistry (UK) Journals Grant for International Authors
2012	CNC-International Union of Pure and Applied Chemistry Travel Award
2011–2016	Tier 2 Canada Research Chair in supramolecular and medicinal chemistry
2010–2011	New Investigator Award, Canadian Institutes of Health Research
2010	Ichikizaki Award for Young Chemists, Canadian Society for Chemistry
2007–2013	Career Scholar Award, Michael Smith Foundation for Health Research
2004	Human Frontier Science Program post-doctoral fellowship
2003	Novartis Foundation post-doctoral fellowship
2002	R. U. Lemieux seminar award, 85th CSC conference
2001	Jairo H. Arévalo memorial award *(Scripps' highest student honour for "scholarship, achievement, enthusiasm, motivation, and commitment")*
2000	NSERC post-graduate fellowship B
1998	NSERC post-graduate fellowship A University of Alberta gold medal in chemistry

AVP LIFE – EVOLUTION OF MAJOR RESPONSIBILITIES OVER TIME

2022–	Post-doctoral fellows: policy overhaul, employment transition, labour relations, ongoing oversight
2022–	Research equipment: policy creation, consultations, ongoing oversight
2022–	Platforms (Proteomics Centre, CanAssist): governance/oversight/facilitation
2022–	Health Core: renovation, establishment, ongoing management
2023–	Animal Care Operations & Ethics: management, budget, regulatory assessments/responses, policy revision
2024–	Research Centres: governance, budgets, reviews, Directors, policy revision, oversight
2024–	Pacific Institute for Climate Solutions: Chair of Executive Committee, governance, oversight
2024–	CIRCLE: managing hiatus period, convening Indigenous scholars/community, planning re-launch
2025–	Grant-funded employees: policy overhaul and labour relations
2025–	OVPRI representative for Routine Capital Advisory (i.e. renovation fund) and Capital Planning Advisory

NATIONAL AND INTERNATIONAL SERVICE

Boards and advisory bodies

2022–present As AVPR I've served on Boards/Member Councils for 15 national research initiatives in diverse areas that include research computing, subatomic physics, mathematics, metabolomics, frailty, aging, quantum algorithms, and more.
2018–2022 Member, Steering Committee, Telluride Conference on Hydrophobicity
2017–2022 Member, Advisory Board, *Journal of Molecular Recognition*
2014–present Member, Editorial Board, *Supramolecular Chemistry*
2013–present Member, International Advisory Board, International Conference on Calixarenes
2013–present Member, Editorial Advisory Board, *Canadian Journal of Chemistry*

Grant review panels

2017–2022 Member, College of Reviewers, CIHR
2017 Member, Chemistry RTI Selection Committee, NSERC
2017 Member, Project Scheme Grant Review Panel, CIHR
2017 Member, Innovation to Commercialization Grant Review Panel, MSFHR
2015 Member, Experimental Therapeutics Discovery Grant Panel, Prostate Cancer Canada
2014 Member, Prostate Research Grant Review Panel, WestCoast Ride to Live
2014 Reader, Strategic Grants Review Panel, Cancer Research Society
2014 Member, Grant-in-Aid Review Panel, Prostate Cancer Foundation of BC
2013–2014 Member, College of Reviewers, NSERC Industrial R&D Fellowships (IRDF)
2013 Member, Prostate Research Grant Review Panel, WestCoast Ride to Live
2013 Member, Biomedical Post-doctoral Fellowship Review Panel, MSFHR
2010 Member, Basic Science Grants Review Panel, Canada Breast Cancer Foundation BC-Yukon Chapter
2010 Member, Fellowship Review Panel, Canada Breast Cancer Foundation BC-Yukon Chapter
2009 Member, Basic Science Grants Review Panel, Canada Breast Cancer Foundation BC-Yukon Chapter

Conference organization

2026 Co-organizer, Symposium on Making Use of Negative Results: Discovery, Unexpected Outcomes, Painful Lessons, and Comprehensive Knowledge for Machines and Humans, CSC National Meeting, Toronto, May 2026.
2023 Technical Program Co-Chair, Canadian Chemistry Conference and Exhibition, Vancouver, June 2023
2022 Co-organizer, Symposium on Biological Applications of Receptors, PacifiChem, Honolulu, Dec. 2022
2018 Organizer, Symposium on Beauty and Function in Supramolecular Chemistry, 101st CSC Meeting, Edmonton, AB, May 2018.
2014 Founder, Opportunities and Challenges for Commercialization of Supramolecular Chemistry, Vancouver, BC, June 6, 2014.
Organizer, Symposium on Supramolecular and Host-Guest Organic Chemistry, 97th CSC Meeting, Vancouver, BC, June 1–5, 2014.
Faculty Liaison and Member of Organizing Committee, Western Canadian Undergraduate Chemistry Conference, Victoria, BC, May 2014.
2013 Co-organizer, Symposium on Advances in Physical Organic Chemistry, 96th CSC Meeting, Quebec, QC, May 2013.
2012 Co-organizer, Symposium on Molecular Recognition and Modern Physical Organic Chemistry, ACS National Meeting, San Diego, CA, March 25-29, 2012.
2010 Organizer, Symposium on Modern Physical Organic Chemistry, 93rd CSC Meeting, Toronto, May 2010.
2008 Co-organizer, Symposium on Chemical Biology, 91st CSC Meeting, Edmonton, AB, May 2008.
2006 Local Organizing Committee, International Symposium on Macrocyclic & Supramolecular Chemistry, Victoria, BC, June 2006.

UNIVERSITY SERVICE (BEFORE AVPR APPOINTMENT)

2022 Aspiration 2030 Post-Doctoral Fellowship Review Panel
2022 LTSI Engaged Learning Fund Grant Review Panel
2021–2022 UVic Task Force on Research Centre Policies
2021–2022 Leadership group, Saanich MedTech Hub

University service, continued

2021–2022	Working Group, Petch Health Core Facility Design Project
2021–2022	Steering Committee, UVic Innovation Network
2021	UVic Collaborative Health Grants Review Panel
2020–present	Research Advisory Committee
2020–present	Peer reviewer, Faculty of Science Equipment (NSERC RTI) Grants
2019–2022	Senate Committee on Admission, Re-registration, and Transfer Appeals (SCARTA)
2019–2022	President's Advisory Committee on External Awards and Honours
2020–2023	University Senate (Faculty Member-at-Large, Elected)
2020–2021	Hiring Committee, CRC II in Quantum Computing for Materials Science (EDI Officer)
2017–2018	President's Strategic Plan Advisory Group
2017	Academic Program Review Committee, UVic Neuroscience Graduate Program
2015	UVic Faculty Association Executive, Member-at-Large (Interim)
2015	Appointment Committee for the Chair, Dept. of Biochemistry and Microbiology
2015	Volunteer Mentor, Faculty Assn. Pre-Tenure and Promotion Mentoring Event.
2013–2015	Science and Medicine Joint Local Safety Committee
2013	Appointment Committee for the Director, Centre for Biomedical Research
2012	Appointment Committee for the Chair, Dept. of Biochemistry and Microbiology
2012	Appointment Committee for Consultant, Occupational Health and Safety (OHS)
2011–2012	Appointment Committee for the Vice President Research
2011–2015	UVic Laboratory Safety Committee
2009	Faculty of Graduate Studies CIHR Master's CGS adjudication committee
2008–2010	Appointment committee, Chemistry Dept. Chair
2008–2013	Bob Wright Centre, Elliott Building, and Petch Building Safety Committees
2005–2011	UVic Hazardous Materials Committee

CHEMISTRY DEPARTMENT SERVICE

2020–2022	Chemistry Equity, Diversity, and Inclusion (ChemEDI) Committee
2020–2022	COVID-19 Adaptation Committee
2018–2022	New Faculty Mentor, Asst. Prof. D. Leitch
2018–2022	Undergraduate Studies Committee
2017–2020	Awards Committee
2017–2018	Hiring Committee, Assistant Teaching Professor of Organic Chemistry
2017–2022	Mass Spectrometry Facility Steering Committee
2017	Hiring Committee, Assistant Professor of Organic Chemistry
2017	ARPT Committee, Promotion to Professor
2017	Hiring Committee, Canada 150 Research Chair
2017	Chair, Curriculum Review Program Structures Working Group
2016–2018	Facilities and Space Committee
2014	Hiring Committee, CRC Tier II in Materials for Biomedical Research
2011–2012	Chair, Chem. Dept. Undergraduate Labs Working Group
2011–2015	Duties Committee
2010	Search Committee, Departmental Secretary/Receptionist
2010	Graduate Studies Committee
2010–2015	Chemistry Students' Society Faculty Liaison
2008–2011	Faithful Departmental Servant / Manager of Bob Wright Centre Building Deficiencies
2008	Hiring Committee, Senior Scientific Assistant (Mass Spectrometry)
2007–2015	Chem. Dept. Safety Officer
2006–present	Peer Reviewer for NSERC Discovery Grants
2005–2008	Bob Wright Centre Design Committee
2005–2008	Undergraduate Studies Committee
2005–2007	Chemistry Students' Society Faculty Liaison
2005–2007	Chemistry Co-op Committee

MENTORING

Fraser won the REACH Award for Excellence in Graduate Student Supervision and Mentorship in 2022. He has directly supervised 30 graduate students and 114 undergraduate researchers. His undergrads have gone on to graduate school and/or careers in diverse areas, including chemistry, engineering, biochemistry, pure math, statistics, epidemiology, cancer biology, immunology, microbiology, and pharmacology, as well as in several branches of government. His graduate students and post-docs have gone on to careers in pharma (e.g. Vertex Pharmaceuticals, Paraza Pharma, GlaxoSmithKline, Pharmaster Labs), biotechnology (e.g. Seattle Genetics, Zymeworks, StemCell Technologies), academia (professors in Canada, Denmark, and India), and government (e.g. BC Ministry of Health). A list of current and past trainees and their career progressions is available at hoflab.com/team. His research group currently includes 5 graduate students (2 of whom are co-supervised), and 5 undergraduates.

Fraser also carries out extensive peer mentoring. He was the invited senior academic mentor for a group of 12 young professors at the 2018 Canadian Workshop for Leading Young Organic Chemists (Edmonton, AB), has formally mentored UVic colleagues in multiple venues (LTSI Teaching Squares, Learning and Teaching Centre presentations, Faculty Association mentoring sessions, career panels, etc), and has formally mentored a junior UVic chemistry professor in research and career progression. He has also served as Scientist Mentor for health and life sciences entrepreneurs from BC and Ontario through the Creative Destruction Labs program.

In his role as AVPR, Fraser has participated formally in UVic's new faculty orientation sessions each year. He conducts a Centre Directors community of practice, and is often engaged with UVic faculty members who are seeking mentoring in support of their own leadership practices and aspirations.

RESEARCH FUNDING

Research Chairs

Agency (Program)	**Time period**	**$ per annum**
Canada Research Chair (Tier 2)	2016–2021	$100,000
Royal Netherlands Academy of Arts & Sciences (Visiting Professorship)	2015–2016	$18,324
Canada Research Chair (Tier 2)	2011–2016	$100,000
MSFHR (Career Scholar)	2011–2013	$15,000
CIHR (New Investigator Award)	2010–2011	$60,000
MSFHR (Career Scholar)	2010–2011	$35,000

Grants (selected grants from last ten years only)

Agency (Program) Title	**Grant holders** (PI indicated)	**Time period**	**Amount awarded** (to Dr. Hof)
NSERC (Discovery Grant) Complex supramolecular systems and high-affinity hosts for biological applications	Fraser Hof	2024–2029	$420,000/$84K p.a.
EU (MCSA Staff Exchanges Program) ENRICH: Molecular receptors enrich Methylated and acetylated peptides for ultra-sensitive proteomics to explore the hidden modified proteome in disease	R. Pinalli (PI) + 7 others (co-I's) + F. Hof (receptor)	2024–2028	*exchange network* (~€6000 p.a. to me)
MITACS (Accelerate) Accelerating the development of antimicrobial peptides as replacements for antibiotics in poultry farms	I. Birol (PI) F. Hof C. Helbing R. Barichello	2022–2025	$908,333 total ($260,000 to me)
UVic LTSI (Engaged Learning Fund) Coupling Professional Development with Community and Indigenous Engagement in a Capstone Chemistry Experience	Fraser Hof	2021–2023	$7,500

Grants, continued

Agency (Program) Title	Grant holders (PI indicated)	Time period	Amount awarded (to Dr. Hof)
MITACS (Globalink Research Award) New sensing approach for illicit drugs by supramolecular chemosensors	Joana Krämer (student) Fraser Hof (PI)	2021	$6,000
Genome Canada (Large Scale Research Project) PeptAid – Antimicrobial peptides to replace antibiotics in farm veterinary practice	Inanc Birol (PI) Fraser Hof 11 others	2020–2025	$6,887,628 ($238,800 to me)
AstraZeneca UK (Collaborative Research Grant) Medicinal chemistry optimization of inhibitors of the CBX7-H3K27me3 epigenetic interaction for castration resistant prostate cancer	Fraser Hof	2020–2021	$124,625
NSERC (RTI) Automated synthesizer for diversity-oriented synthesis of peptides and peptoids	Fraser Hof	2020	$149,683
NSERC (Discovery Grant) Diversity-driven supramolecular and systems chemistry for biological applications	Fraser Hof	2019–2024	$470,000/$94K p.a.
NSERC (Idea to Innovation) MethylTrap: chemical affinity reagents for reliable and reproducible PTM-targeted proteomics	Fraser Hof (PI) L. Foster	2019–2020	$125,000 ($59,000 to me)
CFI/BCKDF (JELF) High-throughput synthetic organic chemistry: hands-on generation of experimental big data to improve human health	David Leitch (PI) Fraser Hof J. Wulff	2019-2020	$340,400 ($10,000 to me)
NSERC (RTI) UPLC as a high-throughput analytics platform for organic chemistry	David Leitch (PI) J.S. McIndoe, J. Wulff Fraser Hof, L. Rosenberg	2019	$149,486 ($29,897 to me)
MITACS (Accelerate) Molecular measures of yeast exhaustion in commercial brewing	Charlotte Dewar (student) Fraser Hof (PI)	2019	$15,000
NSERC (Engage Grant – ChemRoutes) Identifying bioisosteres for cationic epigenetic motifs	Fraser Hof	2018	$25,000
Genome Canada (Disruptive Innovation in Genomics) A chemo-affinity toolkit for methylation proteomics	Fraser Hof	2016–2018	$238,800
NSERC (RTI) Multimode microplate reader and automated liquids handling system	Fraser Hof (PI) B. Hawkins, J. Burke C. Cameron, J. Wulff C. Bohne, J.S. McIndoe	2016	$150,000 ($25,000 to me)

Can. Cancer Society Research Institute (Innovation Grant) Characterization and validation of epigenetic reader CBX2 in cancer using synthetic probes generated from massive chemical diversity	Fraser Hof (PI) C. Helgason Y. Wang	2015–2017	$200,000 ($102,050 to me)
The Cancer Research Society (Operating Grant) Using novel small molecule antagonists to understand and exploit epigenetic polycomb targets that drive aggressive, stem-like ovarian cancer	Fraser Hof (PI) J. Lum	2014–2016	$120,000 ($62,900 to me)
NSERC (Discovery Grant) Supramolecular agents for the binding of challenging protein surface motifs	Fraser Hof	2014–2019	$340,000/$68K p.a.

PUBLICATIONS (last ten years only, career numbering)

Articles published in peer-reviewed journals (full list and links at hoflab.com)

Trainees under Dr. Hof's supervision or co-supervision are underlined. Collaborating PIs are in *italics* and corresponding authors have an asterisk. The authorship convention is that the PI most involved in conceptually driving the project is listed last, while the individual with the largest share of experimental/intellectual work among the trainees is listed first.

91. Allison J. Selinger and Fraser Hof,* **Information-rich sensors by assembly: a review on the use of macrocyclic hosts in the context of complex chemical systems** *Chem. Commun.*, **2025**, *61*, 16701–16716. (invited Feature Article)
90. Anne P. de Groot, Chelsea R. Wilson, Ellen Weersing, Jacobine S. Pouw, Albertina Dethmers-Ausema, Huong Nguyen, Evan F.W. Chen, Alok Shaurya, Linda Smit, Fraser Hof, *Gerald de Haan*,* **Pharmacological targeting of CBX7 alters the epigenetic landscape of leukemic cells and induces terminal differentiation** *Blood Neoplasia*, **2024**, *1,* 100052.
89. Chelsea R. Wilson, Austia O. Puckett, Isabella M. Murray, Allen G. Oliver, Fraser Hof,* **Extended sulfo-pillar[6]arenes – a new host family and its application in the binding of direct oral anticoagulants** *J. Am. Chem. Soc.*, **2024**, *146*, 28005–28013.
88. Chenkai Li, Darcy Sutherland, Amelia Richter, Lauren Coombe, Anat Yanai, René L Warren, Monica Kotkoff, Fraser Hof, *Linda M. N. Hoang*, *Caren C. Helbing*, *Inanc Birol** **De novo synthetic antimicrobial peptide design with a recurrent neural network** *Protein Sci.* **2024**, *33*, e5088.
87. Allison J. Selinger,[1] Joana Krämer,[1], Eric Poarch, *Dennis K. Hore*, *Frank Biedermann*,* Fraser Hof,* **Mixed host co-assembled systems for broad-scope analyte sensing** *Chem. Sci.* **2024**, *15*, 12388–12397.
86. Allison J. Selinger, Fraser Hof,* **Adaptive supramolecular networks: emergent sensing from complex systems** *Angew. Chem. Int. Ed.* **2023**, *62*, e202312407.
85. David King, Chelsea R. Wilson, Lukas Herron, Chun-Lin Deng, Shams Mehdi, *Pratyush Tiwary*,* Fraser Hof,* *Lyle Isaacs*,* **Molecular recognition of methylated amino acids and peptides by Pillar[6]MaxQ** *Org. Biomol. Chem.* **2022**, *20*, 7429–7438.
84. Amelia Richter, Darcy Sutherland, Hossein Ebrahimikondori, Alana Babcock, Nathan Louie, Chenkai Li, Lauren Coombe, Diana Lin, René L. Warren, Anat Yanai, Monica Kotkoff, *Caren C. Helbing*, Fraser Hof, *Linda M.N. Hoang*, *Inanc Birol*,* **Associating biological activity and predicted structure of antimicrobial peptides from amphibians and insects** *Antibiotics* **2022**, *11*, 1710.
83. Chelsea R. Wilson, Evan F.W. Chen, Austia O. Puckett, Fraser Hof,* **Ethoxypillar[6]arene** *Org. Synth.* **2022**, *99*, 125–138.
82. Allison J. Selinger, Natalie A. Cavallin, Anat Yanai, *Inanc Birol*, and Fraser Hof,* **Template-directed synthesis of bivalent, broad-spectrum hosts for neuromuscular blocking agents** Angew. Chem. Int. Ed. **2022**, *61*, e202113235.
81. Zoey Warmerdam,[1] Bianca Kamba,[1] My-Hue Le, *Thomas Schrader*, *Lyle Isaacs*,* *Peter Bayer*,* Fraser Hof* **Binding methylarginines and methyllysines as free amino acids: a comparative study of multiple supramolecular host classes** ChemBioChem, **2022**, *23*, e202100502.
80. Cara Gallo, Suma S. Thomas, Allison J. Selinger, Fraser Hof,* and *Cornelia Bohne** **Mechanism of a Disassembly Driven Sensing System Studied by Stopped-Flow Kinetics** J. Org. Chem. **2021**, *86*, 10782–10787.

Peer-reviewed articles, continued

79. Natalia Milosevich,[1] Chelsea R. Wilson,[1] Tyler M. Brown, Aktan Alpsoy, Sijie Wang, Katelyn E. Connelly, Kirsten A. D. Sinclair, Felino R. Ponio, Rebecca Hof, *Emily C. Dykhuizen*, and Fraser Hof* **Polycomb paralog chromodomain inhibitors active against both CBX6 and CBX8** ChemMedChem, **2021**, 16, 3027–3034.
78. Alok Shaurya, Graham A.E. Garnett, Melissa J. Starke, Mark C. Grasdal, Charlotte C. Dewar, Anton Y. Kliuchynskyi, and Fraser Hof* **An easily accessible, lower rim substituted calix[4]arene selectively binds N,N-dimethyllysine** Org. Biomol. Chem. **2021**,19, 4691–4696.
77. Meagan A. Beatty and Fraser Hof* **Host-guest binding in water, salty water, and biofluids: general lessons for synthetic, bio-targeted molecular recognition** Chem. Soc. Rev. **2021**, 50, 4812–4832.
76. Zoey Warmerdam, Bianca E. Kamba, Alok Shaurya, XuXin Sun, Mary K. Maguire, and Fraser Hof* **Calix[4]arene sulfonate hosts selectively modified on the upper rim: a study of nicotine binding strength and geometry** Supramol. Chem. **2021**, 33, 88–96.
75. Sijie Wang, Kyle Denton, Kathryn Hobbs, Tyler Weaver, James McFarlane, Katelyn Connelly, Michael C. Gignac, Natalia Milosevich, Fraser Hof, *Irina Paci*, *Catherine Musselman*, *Emily Dykhuizen*, *Casey Krusemark** **Optimization of Ligands using Focused DNA-encoded Libraries to Develop a Selective, Cell-permeable CBX8 Chromodomain Inhibitor** ACS Chem. Biol. **2020**, 15, 112–131.
74. Natalia Milosevich, James McFarlane, Michael C. Gignac, Janessa Li, Tyler M. Brown, Chelsea R. Wilson, Lindsay Devorkin, Caitlin S. Croft, Rebecca Hof, *Irina Paci*, *Julian J. Lum*, and Fraser Hof* **Pan-Specific and Partially Selective Dye-Labeled Peptidic Inhibitors of the Polycomb Paralog Proteins** Bioorg. Med. Chem. **2020**, *28*, 115176.
73. Meagan A. Beatty, Allison J. Selinger, YuQi Li, and Fraser Hof* **Parallel synthesis and screening of supramolecular chemosensors that achieve fluorescent turn-on detection of drugs in saliva** J. Am. Chem. Soc. **2019**, 141, 16763–16771.
72. Derek Blevins, Ronan P. Hanley, Trevor Bolduc, David Powell, Michael C. Gignac, Kayleigh Walker, *Mark Carr*, Fraser Hof, *Jeremy Wulff** **In vitro assessment of putative PD-1/PD-L1 inhibitors: suggestions of an alternative mode of action** ACS Med. Chem. Lett. **2019**, 10, 1187–1192.
71. Chakravarthi Simhadri, Kevin D. Daze, Sarah F. Douglas, Natalia Milosevich, Leticia Monjas, Amarjot Dev, Tyler M. Brown, *Anna K. H. Hirsch*, *Jeremy E. Wulff*, and Fraser Hof* **Rational adaptation of L3MBTL1 inhibitors to create small-molecule Cbx7 antagonists** ChemMedChem **2019** 14, 1444–1456.
70. Meagan A. Beatty, Aidan T. Pye, Alok Shaurya, Belim Kim, Allison J. Selinger, Fraser Hof* **Using reversible non-covalent and covalent bonds to create assemblies and equilibrating molecular networks that survive 5 molar urea** Org. Biomol. Chem. **2019**, 17, 2081–2086.
69. Meagan A. Beatty, Jil A. Busmann, Noah G. Fagen, Graham A. E. Garnett, Fraser Hof* **A clip-like host that undergoes self-assembly and competitive guest-induced disassembly in water** Supramol. Chem. **2019**, 31, 101–107.
68. Meagan A. Beatty, Jorge Borges-González, Nicholas J. Sinclair, Aidan T. Pye, Fraser Hof* **Analyte-driven disassembly and turn-on fluorescent sensing in competitive biological media** J. Am. Chem. Soc. **2018**, 140, 3500–3504.
67. Kyle E. Denton, Sijie Wang, Michael C. Gignac, Natalia Milosevich, Fraser Hof, *Emily C. Dykhuizen*, *Casey J. Krusemark** **Robustness of In Vitro Selection Assays of DNA-Encoded Peptidomimetic Ligands to CBX7 and CBX8** SLAS Discovery **2018**, 1–12.
66. Mariam Traoré, Michael Gignac, Ngoc-Duc Doan, Fraser Hof, and *William D. Lubell** **Aza-amino acid scanning of chromobox homolog 7 (CBX7) ligands** J. Peptide Sci. **2017**, 23, 266–271.
65. Chakravarthi Simhadri, Michael C. Gignac, Cameron J. Anderson, Natalia Milosevich, Aman Dheri, Nishant Prashar, Robert T. Flemmer, Amarjot Dev, Trevor G. Henderson, Sarah F. Douglas, *Jeremy E. Wulff*, Fraser Hof* **Structure-activity relationships for Cbx7 inhibitors, including selectivity studies against other Cbx proteins** ACS Omega **2016**, 1, 541–551.
64. Wei Li, Nathan W. Kuehne, Erin Dallin, *Reuwen Gordon*, Fraser Hof* **A supramolecular indicator displacement assay for acetyl amantadine, a proxy biomarker for Spermidine/spermine N^1-acetyltransferase (SSAT) activity** Can. J. Chem. **2016**, 94, 969–975.
63. Natalia Milosevich, Zoey Warmerdam, and Fraser Hof* **Structural aspects of small molecule inhibition of methyllysine reader proteins** Future Med. Chem. **2016**, 13, 1681–1702.
62. Fraser Hof* **Host-guest chemistry that directly targets lysine methylation: synthetic host molecules as alternatives to bio-reagents** Chem. Commun. **2016**, 52, 10093–10108. (Invited Perspective)

Peer-reviewed articles, continued

61. Joanne K. Hobbs, Seunghyae M. Lee, Melissa Robb, Fraser Hof, Christopher Barr, Kento T. Abe, Jan Hendrik Hehemann, Richard McLean, D. *Wade Abbott*, and *Alisdair B. Boraston** **KdgF, the missing link in the microbial metabolism of uronate sugars from pectin and alginate** Proc. Nat. Acad. Sci. USA. **2016**, 113. 6188–6193.
60. Graham A.E. Garnett, Melissa J. Starke, Alok Shaurya, Janessa Li, and Fraser Hof* **Supramolecular affinity chromatography for methylation-targeted proteomics**, Anal. Chem. **2016**, 88, 3697–3703.
59. Graham A.E. Garnett, Kevin D. Daze, J. Peña Diaz, N. Fagen, Alok Shaurya, Manuel C.F. Ma, Mary S. Collins, *Darren W. Johnson*, *Lev Zhakarov*, and Fraser Hof* **Attraction by repulsion: compounds with like charges undergo self-assembly in water that improves in high salt and persists in real biological fluids**, Chem. Commun. **2016**, 52, 2768–2771.
58. Ronan P. Hanley, Shanti Horvath, Jianghong An, Fraser Hof, and *Jeremy E. Wulff** **Salicylates are interference compounds in TR-FRET assays** Bioorg. Med. Chem. Lett. **2016**, 26, 973–977.
57. Natalia Milosevich and Fraser Hof* **Chemical inhibitors of epigenetic methyllysine reader proteins**, Biochemistry, **2016**, 55, 1570–1583.
56. Natalia Milosevich, Michael C. Gignac, James McFarlane, Chakravarthi Simhadri, Shanti Horvath, Kevin D. Daze, Caitlin S. Croft, Aman Dheri, Taylor T.H. Quon, Sarah F. Douglas, *Jeremy E. Wulff*, *Irina Paci*,* and Fraser Hof* **Selective inhibition of CBX6—a methyllysine reader protein in the polycomb family**, ACS Med. Chem. Lett. **2016**, 7, 139–144.

Patents

4. Meagan A. Beatty, Allison J. Selinger, and Fraser Hof, **Compound and dimer complex embodiments for supramolecular sensing** US patent 11,629,128 *issued April 18, 2023*.
3. Graham Garnett and Fraser Hof, **Compounds and conjugates for identifying and separating post-translationally modified analytes** US Patent 10,338,037, *issued July 2, 2019*.
2. Reuven Gordon, Brian Cheng, Rashid Bux, Bram Ramjiawan, Aftab Ahmed, Fraser Hof, **Detection and quantification of acetylamantadine in urine samples** US patent 10,175,226, *issued Jan. 8, 2019*.
1. Fraser Hof,* Samuel Minaker, Kevin Daze, Sara Tabet, and Manual Ma **Method and Array for Identifying Histone-Code-Related Analytes** US Patent 9,879,300, *issued January 30, 2018*.

Books and Chapters

6. Natalia Milosevich* and Fraser Hof, **Inhibitors of methyl reader proteins: foundation of next-generation epigenetic therapies**, invited chapter in *Epigenetic inhibitors: targeting diseases through the development of epigenomic medicine*, **2020**, E. Campeau (Ed.), John Wiley & Sons, Hoboken.
5. Fraser Hof and *Darren W. Johnson*, (Editors) **Aromatic Interactions: Frontiers in Knowledge and Application**, (*Monographs in Supramolecular Chemistry No. 20*), **2017**. Royal Society of Chemistry Press, Cambridge, UK. http://dx.doi.org/10.1039/9781782626626
4. Meagan Beatty and Fraser Hof*, **New technologies powered by peptide- and protein-binding calixarenes**, invited chapter in *Calixarenes and Beyond*, **2016**, P. Neri, J.L. Sessler, and M.-X. Wang (Eds.), Springer-Verlag, Berlin, pp 601–626.
3. Fraser Hof* and Kevin D. Daze, **Molecular Interaction and Recognition**, invited chapter in *The Encyclopedia of Physical Organic Chemistry*, **2017**, Z. Wang (Ed.), John Wiley & Sons, Hoboken, USA, pp 1529–1580. http://dx.doi.org/10.1002/9781118468586.epoc3001

INVITED PRESENTATIONS (last ten years only)

2026	University of Waterloo, Waterloo, ON	March 12, 2026
2025	Nanolytica Symposium, Simon Fraser University, Burnaby, BC	May 8, 2025
2024	University of British Columbia, Vancouver, BC	Jun. 18, 2024
2023	Keynote Lecture, Cdn. Assn. of Postdoctoral Administrators, Victoria, BC	Nov. 10, 2023
	Gilead Lecture, Memorial University of Newfoundland, St. John's, NL	Oct. 16, 2023
2022	Julius Rebek Retirement symposium, La Jolla, CA	Dec. 4, 2022
	University of Minnesota, Minneapolis, MN	Mar. 15, 2022
2021	PacifiChem, 'Biological applications of receptors,' Honolulu, HI	Dec. 20, 2021
	Indira Gandhi NTU, 'Chemical Sciences at the Biointerface' (*Keynote*)	Oct. 26, 2021
2020	Telluride Conference on Hydrophobicity, Telluride, CO	postponed

Presentations, continued

2019	Telluride Conf. on Aqueous Supramolecular Chemistry, Telluride, CO	Aug. 5, 2019
	15th Int. Conf. on Calixarenes, Cassis, France	Jun. 11, 2019
	Helmoltz Institute for Pharmaceutical Research, Saarbrücken, DE	Jun. 6, 2019
	François Diederich Retirement Symposium, Zurich, Switzerland	Jun. 4, 2019
	University of Toronto, Mississauga, ON	Mar. 27, 2019
2018	Int'l Symposium on Supramolecular and Macrocyclic Chemistry, Quebec	Jul. 13, 2018
	101st CSC National Meeting, Peptide Chemistry, Edmonton, AB	May 29, 2018
	14th Organic Workshop for Leading, Young Cdn. Chemists: Mentor talk	May 26, 2018
2017	Tulane Univ., New Orleans, LA	Oct. 23, 2017
	Louisiana State Univ., Baton Rouge, LA	Oct. 20, 2017
	2nd Int'l. Supramolecular Chemistry on Proteins Symposium, Essen, DE	Sep. 20, 2017
	University of British Columbia, Vancouver, BC	Jul. 14, 2017
	100th CSC National Meeting, Intellisyn Award Lecture, Toronto, ON	May 29, 2017
2016	Univ. of North Carolina, Eshelman School of Pharmacy, Chapel Hill, NC	Sep. 28, 2016
	99th CSC National Meeting, Topics in Chemical Biology, Halifax, NS	Jun. 7, 2016
	99th CSC National Meeting, Dynamic Interactions, Halifax, NS	Jun. 6, 2016
	Technical University of Eindhoven, Eindhoven, NL	Feb. 17, 2016
	Radboud University Nijmegen, Nijmegen, NL	Feb. 16, 2016

INNOVATION

Many of Dr. Hof's projects have generated fundamental discoveries with the potential for generating positive impacts on human health, animal health, and/or for commercialization as new tools for researchers. These have been variously developed through collaboration with researcher-clinicians (e.g. BC Cancer Agency, Vancouver Prostate Centre), private sector partners (e.g. AstraZeneca UK, Phillips Brewing & Malting Co.), government partners (e.g. BC Centres for Disease Control), incubators (e.g. adMare Bioinnovations), and through Dr. Hof's own innovation-oriented research (e.g. NSERC Idea to Innovation grant, Genome Canada Large Scale Applied Research Project, Genome BC Proof-of-concept grants). Patent protection has been obtained when appropriate, and Dr. Hof works regularly with UVic Research Partnerships and Knowledge Mobilization. Through his own research and his service as the Director of CAMTEC, Dr. Hof has extensive experience with private sector partnerships, non-profit community organizations, health-driven charitable organizations, research ethics approvals, regulatory approvals, intellectual property, indirect costs, and research contracts.

OUTREACH AND KNOWLEDGE TRANSLATION: ENGAGEMENT WITH THE PUBLIC, INTERVIEWS, AND PRESS

2022	*Stakeholder Engagement,* BC Poultry Professionals, Abbotsford, BC	Mar. 8, 2022
2019	*Scientist Mentor,* Creative Destruction Labs Entrepreneurship Workshops	2019–2020
	Coordinator, unconference high school chemistry teachers Pro-D workshop	Feb. 15, 2019
2018	*Panel member* Cdn. Cancer Society, donors and supporters outreach event	Nov. 2, 2018
	Magazine article on innovative teaching for the Torch alumni magazine	Feb. 27, 2018
	Panel member for high school chemistry teachers Pro-D workshop	Feb. 23, 2018
	Public lecture to ~200 high school students/parents on drugs and chemistry	Feb. 18, 2018
2017	*Lab tour* Vancouver Island Prostate Cancer Support Group	Feb. 26, 2017
2016	*CFAX radio interview* on yeast proteomics	Nov. 10, 2016
	The Martlet news article on brewery collaboration	Nov. 10, 2016
	The Ring news article on brewery collaboration	Nov. 7, 2016
	Vancouver Roundhouse Radio interview on yeast proteomics *(Kirk McFarlane)*	Nov. 7, 2016
	Times Colonist article "Brewer, UVic researching better beer"	Nov. 4, 2016
	CBC.ca news article "Victoria Scientists study the secret to better beer"	Nov. 4, 2016
	CBC Radio interview on yeast proteomics research (All Points West)	Nov. 3, 2016
	Van. Island Prostate Cancer Support Group (*public lecture*)	Oct. 11, 2016
	"The *big* impact of the *smallest* molecules in cancer" Idea fest *public lecture*	Mar. 7, 2016
	"Molecules Matter…" *Times Colonist Islander Magazine* on Hof lab research	Mar. 6, 2016