



Carolyn Bertozzi

Baker Family Director of Sarafan ChEM-H, Anne T. and Robert M. Bass Professor in the School of Humanities and Sciences and Professor, by courtesy, of Chemical and Systems Biology and of Radiology
Chemistry

CONTACT INFORMATION

• Administrative Contacts

Asia Avelino / Gabby Gomez - Administrative Coordinators

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Bio

BIO

Professor Carolyn Bertozzi's research interests span the disciplines of chemistry and biology with an emphasis on studies of cell surface sugars important to human health and disease. Her research group profiles changes in cell surface glycosylation associated with cancer, inflammation and bacterial infection, and uses this information to develop new diagnostic and therapeutic approaches, most recently in the area of immuno-oncology.

Dr. Bertozzi completed her undergraduate degree in Chemistry at Harvard University and her Ph.D. at UC Berkeley, focusing on the chemical synthesis of oligosaccharide analogs. During postdoctoral work at UC San Francisco, she studied the activity of endothelial oligosaccharides in promoting cell adhesion at sites of inflammation. She joined the UC Berkeley faculty in 1996. A Howard Hughes Medical Institute Investigator since 2000, she came to Stanford University in June 2015, among the first faculty to join the interdisciplinary institute ChEM-H (Chemistry, Engineering & Medicine for Human Health). She is now the Baker Family Director of Stanford ChEM-H.

Named a MacArthur Fellow in 1999, Dr. Bertozzi has received many awards for her dedication to chemistry, and to training a new generation of scientists fluent in both chemistry and biology. She has been elected to the Institute of Medicine, National Academy of Sciences, and American Academy of Arts and Sciences; and received the Lemelson-MIT Prize, the Heinrich Wieland Prize, the ACS Award in Pure Chemistry, and the Chemistry of the Future Solvay Prize, among others.

The Bertozzi Group develops chemical tools to study the glycobiology underlying diseases such as cancer, inflammation, tuberculosis and most recently COVID-19. She is the inventor of "bioorthogonal chemistry", a class of chemical reactions compatible with living systems that enable molecular imaging and drug targeting. Her group also developed new therapeutic modalities for targeted degradation of extracellular biomolecules, such as antibody-enzyme conjugates and Lysosome Targeting Chimeras (LYTACs). As well, her group studies NGLY1 deficiency, a rare genetic disease characterized by loss of the human N-glycanase.

Several of the technologies developed in the Bertozzi lab have been adapted for commercial use. Actively engaged with several biotechnology start-ups, Dr. Bertozzi cofounded Redwood Bioscience, Enable Biosciences, Palleon Pharmaceuticals, InterVenn Bio, OliLux Bio, Grace Science LLC and Lycia Therapeutics. She is also a member of the Board of Directors of Lilly.

ACADEMIC APPOINTMENTS

- Professor, Chemistry
- Professor (By courtesy), Radiology - Rad/Molecular Imaging Program at Stanford
- Professor (By courtesy), Chemical and Systems Biology
- Member, Bio-X
- Member, Wu Tsai Human Performance Alliance
- Member, Maternal & Child Health Research Institute (MCHRI)
- Director, Sarafan ChEM-H
- Member, Stanford Cancer Institute
- Member, Wu Tsai Neurosciences Institute

ADMINISTRATIVE APPOINTMENTS

- Baker Family Director, Stanford ChEM-H, (2020- present)
- Investigator, Howard Hughes Medical Institute, (2000- present)

HONORS AND AWARDS

- Arthur C. Cope Award, American Chemical Society (2017)
- National Academy of Sciences Award in the Chemical Sciences, National Academy of Sciences (2016)
- Ernest Orlando Lawrence Award, U.S. Department of Energy (2015)
- Heinrich Wieland Prize, Heinrich Wieland Prize (2012)
- Lemelson-MIT Prize, Massachusetts Institute of Technology (2010)
- Ernst Schering Prize, Ernst Schering Research Foundation (2007)
- Distinguished Teaching Award, UC Berkeley College of Chemistry (2001)
- Award in Pure Chemistry, American Chemical Society (2001)
- MacArthur Foundation "Genius" Award, MacArthur Foundation (1999)
- Arthur C. Cope Scholar Award, American Chemical Society (1999)
- Honorary Degree, Freie University Berlin (2014)
- Honorary Doctorate Degree, Duke University (2014)
- Hans Bloemendal Award, Radboud Univ. Nijmegen (2013)
- Honorary Doctorate Degree, Brown University (2012)
- Tetrahedron Young Investigator Award, Executive Board of Editors and the Publisher of Tetrahedron Publications (2011)
- Albert Hofmann Medal, U. Zurich (2009)
- Harrison Howe Award, Rochester Section, American Chemical Society (2009)
- W. H. Nichols Award, New York Section, American Chemical Society (2009)
- Li Ka Shing Women in Science Award, Li Ka Shing Foundation Women in Science Program (2008)
- Roy L. Whistler International Award in Carbohydrate Chemistry, International Carbohydrate Organization (2008)
- Willard Gibbs Medal, Chicago Section, American Chemical Society (2008)
- T.Z. and Irmgard Chu Distinguished Professorship in Chemistry, UC Berkeley (2005-14)
- Havinga Medal, U. Leiden (2005)
- Agnes Fay Morgan Research Award, Iota Sigma Pi (2004)

- Fellow, American Association for the Advancement of Science (2002)
- Irving Sigal Young Investigator Award, Protein Society (2002)
- Donald Sterling Noyce Prize for Excellence in Undergraduate Teaching, UC Berkeley College of Chemistry (2001)
- Department of Chemistry Teaching Award, UC Berkeley (2000)
- Merck Academic Development Program Award, Merck (2000)
- Presidential Early Career Award in Science and Engineering (PECASE), The U.S. White House (2000)
- Camille Dreyfus Teacher-Scholar Award, Camille and Henry Dreyfus Foundation (1999)
- Beckman Young Investigator Award, Arnold and Mabel Beckman Foundation (1998)
- Glaxo Wellcome Scholar, Glaxo Wellcome (1998)
- Prytanean Faculty Award, Prytanean Women's Honor Society, UC Berkeley (1998)
- Research Innovation Award, Research Corporation (1998)
- Young Investigator Award, Office of Naval Research (1998)
- Horace S. Isbell Award in Carbohydrate Chemistry, American Chemical Society (1997)
- New Investigator Award in Pharmacology, Burroughs Wellcome (1997)
- Sloan Research Fellow, Alfred P. Sloan Foundation (1997)
- Pew Scholars Award in the Biomedical Sciences, Pew Charitable Trusts (1996)
- Young Investigator Award, Exxon Education Fund (1996)
- Dreyfus New Faculty Award, Camille and Henry Dreyfus Foundation (1995)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, National Academy of Inventors (2013 - present)
- Member, Institute of Medicine (2011 - present)
- Member, German Academy of Sciences Leopoldina (2008 - present)
- Member, National Academy of Sciences (2005 - present)
- Member, American Academy of Arts and Sciences (2003 - present)
- Chair, Scientific Advisory Board, Redwood Bioscience
- Board Member, Board of Scientific Counslors, Broad Institutue
- Board Member, Catalent Biologics Board
- Board Member, Research Advisory Baord, Glaxo Smithkline

PROFESSIONAL EDUCATION

- Postdoc, UC San Francisco , Immunology
- PhD, UC Berkeley , Chemistry (1993)
- AB, Harvard University , Chemistry (1988)

LINKS

- The Bertozzi Group: <http://bertozzigroup.stanford.edu>
- HHMI Investigator Biography: <http://www.hhmi.org/scientists/carolyn-r-bertozzi>
- Q&A with Dr. Bertozzi: <https://chemh.stanford.edu/news/stanford-chemist-explains-excitement-chemistry-students-public>

Teaching

COURSES

2023-24

- Therapeutic Science at the Chemistry - Biology Interface: CHEM 283 (Spr)

2022-23

- The Chemical Principles of Life I: CHEM 141 (Win)

2021-22

- Therapeutic Science at the Chemistry - Biology Interface: CHEM 281 (Spr)

2020-21

- Therapeutic Science at the Chemistry - Biology Interface: CHEM 281 (Win)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Dayanne Carvalho, Yaereen Dho, Franco Faucher, Aswini Krishnan, Veronica Li, Chih-Hao Lu, Magdalena Murray, Sophia Shi, Lauren Varanese, Amanda Wiggenhorn

Postdoctoral Faculty Sponsor

Lindsay Guzman, Johannes Hevler, Gabriela Lomeli, Mariko Morimoto, David Roberts, Mirat Sojitra, Nicholas Till

Doctoral Dissertation Advisor (AC)

L Handy, Angel Kuo, Sherry Li, Cindy Sandoval Espinoza, Gabby Tender, Shivam Verma, Chloe Wen, Jonathan Yang

Doctoral Dissertation Co-Advisor (AC)

Kang Yong Loh, Siavash Moghadami, Andrew Reiter

Publications

PUBLICATIONS

- **Membrane curvature regulates the spatial distribution of bulky glycoproteins** *NATURE COMMUNICATIONS*
Lu, C., Pedram, K., Tsai, C., Jones IV, T., Li, X., Nakamoto, M. L., Bertozzi, C. R., Cui, B.
2022; 13
- **Protocol for cell type-specific labeling, enrichment, and proteomic profiling of plasma proteins in mice.** *STAR protocols*
Wei, W., Riley, N. M., Lyu, X., Bertozzi, C. R., Long, J. Z.
1800; 2 (4): 101014
- **Multi-omics analysis of spatially distinct stromal cells reveals tumor-induced O-glycosylation of the CDK4-pRB axis in fibroblasts at the invasive tumor edge.** *Cancer research*
Bouchard, G., Garcia-Marques, F. J., Karacosta, L. G., Zhang, W., Bermudez, A., Riley, N. M., Varma, S., Mehl, L. C., Benson, J. A., Shrager, J. B., Bertozzi, C. R., Pitteri, S. J., Giaccia, et al
2021
- **Toward Point-of-Care Detection of Mycobacterium tuberculosis: A Brighter Solvatochromic Probe Detects Mycobacteria within Minutes.** *JACS Au*
Kamariza, M., Keyser, S. G., Utz, A., Knapp, B. D., Ealand, C., Ahn, G., Cambier, C. J., Chen, T., Kana, B., Huang, K. C., Bertozzi, C. R.
2021; 1 (9): 1368-1379
- **Small RNAs are modified with N-glycans and displayed on the surface of living cells.** *Cell*
Flynn, R. A., Pedram, K., Malaker, S. A., Batista, P. J., Smith, B. A., Johnson, A. G., George, B. M., Majzoub, K., Villalta, P. W., Carette, J. E., Bertozzi, C. R.
2021

- **Synthetic Siglec-9 Agonists Inhibit Neutrophil Activation Associated with COVID-19** *ACS CENTRAL SCIENCE*
Delaveris, C. S., Wilk, A. J., Riley, N. M., Stark, J. C., Yang, S. S., Rogers, A. J., Ranganath, T., Nadeau, K. C., Blish, C. A., Bertozzi, C. R., Stanford COVID-19 Biobank
2021; 7 (4): 650-657
- **Synthetic Siglec-9 Agonists Inhibit Neutrophil Activation Associated with COVID-19.** *ACS central science*
Delaveris, C. S., Wilk, A. J., Riley, N. M., Stark, J. C., Yang, S. S., Rogers, A. J., Ranganath, T., Nadeau, K. C., Blish, C. A., Bertozzi, C. R.
2021; 7 (4): 650-657
- **Optimization of Metabolic Oligosaccharide Engineering with Ac4GalNAk and Ac4GlcNAk by an Engineered Pyrophosphorylase.** *ACS chemical biology*
Cioce, A., Bineva-Todd, G., Agbay, A. J., Choi, J., Wood, T. M., Debets, M. F., Browne, W. M., Douglas, H. L., Roustan, C., Tastan, O. Y., Kjaer, S., Bush, J. T., Bertozzi, et al
2021
- **LYTACs that engage the asialoglycoprotein receptor for targeted protein degradation.** *Nature chemical biology*
Ahn, G., Banik, S. M., Miller, C. L., Riley, N. M., Cochran, J. R., Bertozzi, C. R.
2021
- **Degradation from the outside in: targeting extracellular and membrane proteins for degradation through the endolysosomal pathway.** *Cell chemical biology*
Ahn, G., Banik, S. M., Bertozzi, C. R.
2021
- **Discovery and functional interrogation of SARS-CoV-2 RNA-host protein interactions.** *Cell*
Flynn, R. A., Belk, J. A., Qi, Y., Yasumoto, Y., Wei, J., Alfajaro, M. M., Shi, Q., Mumbach, M. R., Limaye, A., DeWeirdt, P. C., Schmitz, C. O., Parker, K. R., Woo, et al
2021
- **Author Correction: The clinical impact of glycobiology: targeting selectins, Siglecs and mammalian glycans.** *Nature reviews. Drug discovery*
Smith, B. A., Bertozzi, C. R.
2021
- **Genome-wide CRISPR screens reveal a specific ligand for the glycan-binding immune checkpoint receptor Siglec-7.** *Proceedings of the National Academy of Sciences of the United States of America*
Wisnovsky, S., Mockl, L., Malaker, S. A., Pedram, K., Hess, G. T., Riley, N. M., Gray, M. A., Smith, B. A., Bassik, M. C., Moerner, W. E., Bertozzi, C. R.
2021; 118 (5)
- **Capture and visualization of live Mycobacterium tuberculosis bacilli from tuberculosis patient bioaerosols.** *PLoS pathogens*
Dinkele, R., Gessner, S., McKerry, A., Leonard, B., Seldon, R., Koch, A. S., Morrow, C., Gqada, M., Kamariza, M., Bertozzi, C. R., Smith, B., McLoud, C., Kamholz, et al
2021; 17 (2): e1009262
- **Modulation of immune cell reactivity with cis-binding Siglec agonists.** *Proceedings of the National Academy of Sciences of the United States of America*
Delaveris, C. S., Chiu, S. H., Riley, N. M., Bertozzi, C. R.
2021; 118 (3)
- **The clinical impact of glycobiology: targeting selectins, Siglecs and mammalian glycans.** *Nature reviews. Drug discovery*
Smith, B. A., Bertozzi, C. R.
2021
- **Deacetylated sialic acids modulates immune mediated cytotoxicity via the sialic acid-Siglec pathway.** *Glycobiology*
Grabenstein, S., Barnard, K. N., Anim, M., Armoo, A., Weichert, W. S., Bertozzi, C. R., Parrish, C. R., Willand-Charnley, R.
2021
- **Systemic delivery of a targeted synthetic immunostimulant transforms the immune landscape for effective tumor regression.** *Cell chemical biology*
Miller, C. L., Sagiv-Barfi, I., Neuhöfer, P., Czerwinski, D. K., Artandi, S. E., Bertozzi, C. R., Levy, R., Cochran, J. R.
2021
- **On-tissue spatially resolved glycoproteomics guided by N-glycan imaging reveal global dysregulation of canine glioma glycoproteomic landscape.** *Cell chemical biology*
Malaker, S. A., Quanicco, J., Raffo-Romero, A., Kobeissy, F., Aboulouard, S., Tierny, D., Bertozzi, C. R., Fournier, I., Salzet, M.

2021

- **The CD22-IGF2R interaction is a therapeutic target for microglial lysosome dysfunction in Niemann-Pick type C.** *Science translational medicine*
Pluvinage, J. V., Sun, J., Claes, C., Flynn, R. A., Haney, M. S., Iram, T., Meng, X., Lindemann, R., Riley, N. M., Danhash, E., Chadarevian, J. P., Tapp, E., Gate, et al
2021; 13 (622): eabg2919
- **An enzymatic toolkit for selective proteolysis, detection, and visualization of mucin-domain glycoproteins**
Shon, D., Malaker, S. A., Pedram, K., Yang, E., Krishnan, V., Dorigo, O., Bertozzi, C. R.
OXFORD UNIV PRESS INC.2020: 1111–12
- **On-tissue microscale glycoproteomics and N-glycan imaging reveal global dysregulation of canine glioma glycoproteomic landscape**
Malaker, S. A., Quanico, J., Romero, A. R., Pascal, Q., Kobeissy, F., Abou-louard, S., Tierny, D., Bertozzi, C. R., Fournier, I., Salzet, M.
OXFORD UNIV PRESS INC.2020: 1077
- **O-Pair Search with MetaMorpheus for O-glycopeptide Characterization**
Riley, N. M., Lu, L., Shortreed, M. R., Smith, L. M., Bertozzi, C. R.
OXFORD UNIV PRESS INC.2020: 1100–1101
- **Dissecting O-GalNAc glycosylation by glycosyltransferase engineering**
Tastan, O. Y., Debets, M. F., Malaker, S. A., Wisnovsky, S. P., Angelis, N., Wagner, L. S., Choi, J., Browne, W. M., Bineva-Todd, G., Cioce, A., Agbay, A. J., Li, Z., Briggs, et al
OXFORD UNIV PRESS INC.2020: 1028
- **Spreading of a mycobacterial cell surface lipid into host epithelial membranes promotes infectivity.** *eLife*
Cambier, C. J., Banik, S. M., Buonomo, J. A., Bertozzi, C. R.
2020; 9
- **Cell type-selective secretome profiling in vivo.** *Nature chemical biology*
Wei, W., Riley, N. M., Yang, A. C., Kim, J. T., Terrell, S. M., Li, V. L., Garcia-Contreras, M., Bertozzi, C. R., Long, J. Z.
2020
- **O-Pair Search with MetaMorpheus for O-glycopeptide characterization.** *Nature methods*
Lu, L., Riley, N. M., Shortreed, M. R., Bertozzi, C. R., Smith, L. M.
2020
- **Targeted glycan degradation potentiates the anticancer immune response in vivo.** *Nature chemical biology*
Gray, M. A., Stanczak, M. A., Mantuano, N. R., Xiao, H., Pijnenborg, J. F., Malaker, S. A., Miller, C. L., Weidenbacher, P. A., Tanzo, J. T., Ahn, G., Woods, E. C., Laubli, H., Bertozzi, et al
2020
- **Lysosome-targeting chimaeras for degradation of extracellular proteins.** *Nature*
Banik, S. M., Pedram, K., Wisnovsky, S., Ahn, G., Riley, N. M., Bertozzi, C. R.
2020
- **Immunoglobulin E sialylation regulates allergic responses.** *Immunology and cell biology*
Xie, M. M., Bertozzi, C. R., Wang, T. T.
2020
- **Physiological blood-brain transport is impaired with age by a shift in transcytosis.** *Nature*
Yang, A. C., Stevens, M. Y., Chen, M. B., Lee, D. P., Stahli, D., Gate, D., Contrepolis, K., Chen, W., Iram, T., Zhang, L., Vest, R. T., Chaney, A., Lehallier, et al
2020
- **Membrane-tethered mucin-like polypeptides sterically inhibit binding and slow fusion kinetics of influenza A virus.** *Proceedings of the National Academy of Sciences of the United States of America*
Delaveris, C. S., Webster, E. R., Banik, S. M., Boxer, S. G., Bertozzi, C. R.
2020
- **Introducing "In Focus", Community Resources Accelerating Science** *ACS CENTRAL SCIENCE*
Bertozzi, C. R., Garakyaraghi, S.
2020; 6 (4): 446–47

- **A genome-wide CRISPR screen identifies novel ligands for the Siglec family of glyco-immune checkpoint receptors.** Wisnovsky, S., Bertozzi, C. AMER ASSOC CANCER RESEARCH.2020: 80–81
- **DNA origami protection and molecular interfacing through engineered sequence-defined peptoids.** *Proceedings of the National Academy of Sciences of the United States of America* Wang, S., Gray, M. A., Xuan, S., Lin, Y., Byrnes, J., Nguyen, A. I., Todorova, N., Stevens, M. M., Bertozzi, C. R., Zuckermann, R. N., Gang, O. 2020
- **DNA-PKCs has KU-dependent function in rRNA processing and haematopoiesis.** *Nature* Shao, Z., Flynn, R. A., Crowe, J. L., Zhu, Y., Liang, J., Jiang, W., Aryan, F., Aoude, P., Bertozzi, C. R., Estes, V. M., Lee, B. J., Bhagat, G., Zha, et al 2020
- **Deconvolution of Influenza a Viral Binding and Fusion with a Chemically-Defined Glycocalyx** Webster, E. R., Delaveris, C. S., Bertozzi, C. R., Boxer, S. G. CELL PRESS.2020: 553A
- **Large Glycocalyx Proteins are Excluded from the Interface between Cell Membrane and Vertical Nanostructures** Lu, C., Jones, T., Pedram, K., Bertozzi, C., Paszek, M., Cui, B. CELL PRESS.2020: 396A
- **Movers & shakers** CHEMISTRY & INDUSTRY Bertozzi, C., Hildemann, S., Young, S. 2020; 84 (2): 14
- **Author Correction: Lipid-droplet-accumulating microglia represent a dysfunctional and proinflammatory state in the aging brain.** *Nature neuroscience* Marschallinger, J., Iram, T., Zardeneta, M., Lee, S. E., Lehallier, B., Haney, M. S., Pluvinage, J. V., Mathur, V., Hahn, O., Morgens, D. W., Kim, J., Tevini, J., Felder, et al 2020
- **Lipid-droplet-accumulating microglia represent a dysfunctional and proinflammatory state in the aging brain.** *Nature neuroscience* Marschallinger, J., Iram, T., Zardeneta, M., Lee, S. E., Lehallier, B., Haney, M. S., Pluvinage, J. V., Mathur, V., Hahn, O., Morgens, D. W., Kim, J., Tevini, J., Felder, et al 2020
- **Author Correction: Lipid-droplet-accumulating microglia represent a dysfunctional and proinflammatory state in the aging brain.** *Nature neuroscience* Marschallinger, J. n., Iram, T. n., Zardeneta, M. n., Lee, S. E., Lehallier, B. n., Haney, M. S., Pluvinage, J. V., Mathur, V. n., Hahn, O. n., Morgens, D. W., Kim, J. n., Tevini, J. n., Felder, et al 2020
- **Synthetic Siglec-9 Agonists Inhibit Neutrophil Activation Associated with COVID-19.** *ChemRxiv : the preprint server for chemistry* Delaveris, C. n., Wilk, A. n., Riley, N. n., Stark, J. n., Yang, S. n., Rogers, A. n., Ranganath, T. n., Nadeau, K. n., Blish, C. n., Bertozzi, C. n. 2020
- **Systematic discovery and functional interrogation of SARS-CoV-2 viral RNA-host protein interactions during infection.** *bioRxiv : the preprint server for biology* Flynn, R. A., Belk, J. A., Qi, Y. n., Yasumoto, Y. n., Schmitz, C. O., Mumbach, M. R., Limaye, A. n., Wei, J. n., Alfajaro, M. M., Parker, K. R., Chang, H. Y., Horvath, T. L., Carette, et al 2020
- **Bump-and-Hole Engineering Identifies Specific Substrates of Glycosyltransferases in Living Cells.** *Molecular cell* Schumann, B. n., Malaker, S. A., Wisnovsky, S. P., Debets, M. F., Agbay, A. J., Fernandez, D. n., Wagner, L. J., Lin, L. n., Li, Z. n., Choi, J. n., Fox, D. M., Peh, J. n., Gray, et al 2020
- **Enhanced Bactericidal Effects of Pyrazinamide Toward Mycobacterium smegmatis and Mycobacterium tuberculosis upon Conjugation to a {Au(I)-triphenylphosphine}⁺ Moiety.** *ACS omega* Stenger-Smith, J. n., Kamariza, M. n., Chakraborty, I. n., Ouattara, R. n., Bertozzi, C. R., Mascharak, P. K. 2020; 5 (12): 6826–33
- **A Fluorogenic Trehalose Probe for Tracking Phagocytosed Mycobacterium tuberculosis.** *Journal of the American Chemical Society*

- Dai, T. n., Xie, J. n., Zhu, Q. n., Kamariza, M. n., Jiang, K. n., Bertozzi, C. R., Rao, J. n.
2020
- **Optimal Dissociation Methods Differ for N- and O-glycopeptides.** *Journal of proteome research*
Riley, N. M., Malaker, S. A., Driessen, M. n., Bertozzi, C. R.
2020
 - **An enzymatic toolkit for selective proteolysis, detection, and visualization of mucin-domain glycoproteins.** *Proceedings of the National Academy of Sciences of the United States of America*
Shon, D. J., Malaker, S. A., Pedram, K. n., Yang, E. n., Krishnan, V. n., Dorigo, O. n., Bertozzi, C. R.
2020
 - **A Pragmatic Guide to Enrichment Strategies for Mass Spectrometry-Based Glycoproteomics.** *Molecular & cellular proteomics : MCP*
Riley, N. M., Bertozzi, C. R., Pitteri, S. J.
2020; 20: 100029
 - **A Pragmatic Guide to Enrichment Strategies for Mass Spectrometry-based Glycoproteomics.** *Molecular & cellular proteomics : MCP*
Riley, N. M., Bertozzi, C. R., Pitteri, S. J.
2020
 - **Sensitive detection of multiple islet autoantibodies in type 1 diabetes using small sample volumes by agglutination-PCR.** *PLoS one*
Cortez, F. d., Gebhart, D., Robinson, P. V., Seftel, D., Pourmandi, N., Owyong, J., Bertozzi, C. R., Wilson, D. M., Maahs, D. M., Buckingham, B. A., Mills, J. R., Roforth, M. M., Pittock, et al
2020; 15 (11): e0242049
 - **An Acquired and Endogenous Glycocalyx Forms a Bidirectional "Don't Eat" and "Don't Eat Me" Barrier to Phagocytosis.** *Current biology : CB*
Imbert, P. R., Saric, A. n., Pedram, K. n., Bertozzi, C. R., Grinstein, S. n., Freeman, S. A.
2020
 - **Electron-Based Dissociation Is Needed for O-Glycopeptides Derived from OPERATOR Proteolysis.** *Analytical chemistry*
Riley, N. M., Malaker, S. A., Bertozzi, C. R.
2020
 - **Sensitivity optimisation of tuberculosis bioaerosol sampling.** *PLoS one*
Patterson, B. n., Dinkele, R. n., Gessner, S. n., Morrow, C. n., Kamariza, M. n., Bertozzi, C. R., Kamholz, A. n., Bryden, W. n., Call, C. n., Warner, D. F., Wood, R. n.
2020; 15 (9): e0238193
 - **Metabolic precision labeling enables selective probing of O-linked N-acetylgalactosamine glycosylation.** *Proceedings of the National Academy of Sciences of the United States of America*
Debets, M. F., Tastan, O. Y., Wisnovsky, S. P., Malaker, S. A., Angelis, N. n., Moeckl, L. K., Choi, J. n., Flynn, H. n., Wagner, L. J., Bineva-Todd, G. n., Antonopoulos, A. n., Cioce, A. n., Browne, et al
2020
 - **Updates to the Symbol Nomenclature for Glycans guidelines** *GLYCOBIOLOGY*
Neelamegham, S., Aoki-Kinoshita, K., Bolton, E., Frank, M., Lisacek, F., Luetke, T., O'Boyle, N., Packer, N. H., Stanley, P., Toukach, P., Varki, A., Woods, R. J., Darvill, et al
2019; 29 (9): 620–24
 - **Engineering Orthogonal Polypeptide GalNAc-Transferase and UDP-Sugar Pairs** *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*
Choi, J., Wagner, L. S., Timmermans, S. E., Malaker, S. A., Schumann, B., Gray, M. A., Debets, M. F., Takashima, M., Gehring, J., Bertozzi, C. R.
2019; 141 (34): 13442–53
 - **CRISPR-Cas9 screens identify regulators of antibody-drug conjugate toxicity.** *Nature chemical biology*
Tsui, C. K., Barfield, R. M., Fischer, C. R., Morgens, D. W., Li, A., Smith, B. A., Gray, M. A., Bertozzi, C. R., Rabuka, D., Bassik, M. C.
2019
 - **Quantitative super-resolution microscopy of the mammalian glycocalyx**
Mockl, L., Pedram, K., Roy, A., Krishnan, V., Gustavsson, A., Dorigo, O., Bertozzi, C., Moerner, W.
AMER CHEMICAL SOC.2019

- **Enzyme toolkit for selective enrichment and analysis of mucin-domain glycoproteins**
Malaker, S. A., Shon, J., Pedram, K., Riley, N. M., Bertozzi, C. R.
AMER SOC BIOCHEMISTRY MOLECULAR BIOLOGY INC.2019: S42
- **An RNA-centric dissection of host complexes controlling flavivirus infection.** *Nature microbiology*
Ooi, Y. S., Majzoub, K., Flynn, R. A., Mata, M. A., Diep, J., Li, J. K., van Buuren, N., Rumachik, N., Johnson, A. G., Puschnik, A. S., Marceau, C. D., Mlera, L., Grabowski, et al
2019
- **A novel therapeutic modality of inhibiting the glyco-immune checkpoint axis to treat cancer**
Cao, L., Petrone, A., Gatlin, W., Che, J., Das, A., LeBlanc, R., Siddiquee, Z., Nerle, S., Stanczak, M., Mayo, M., Xu, L., Normington, K., Brown, et al
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- **Physical Principles of Membrane Shape Regulation by the Glycocalyx** *CELL*
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PRESENTATIONS

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- People Behind the Science (2015)
- iBiology Lecture Series Part 1: Chemical Glycobiology (3/1/2010)
- iBiology Lecture Series Part 2: Imaging the Glycome
- TEDx Stanford Lecture: The sugar coating on your cells is trying to tell you something - TEDx Stanford (June 22, 2016)