

2021 Biochemistry and Biophysics publications

From the *Barbar* group

Rodriguez Galvan J, Donner B, Veseley CH, Reardon P, Forsythe HM, Howe J, Fujimura G, **Barbar** E. [Human Parainfluenza Virus 3 Phosphoprotein Is a Tetramer and Shares Structural and Interaction Features with Ebola Phosphoprotein VP35](#). *Biomolecules*. 2021 Oct 29; 11(11):1603. <https://doi.org/10.3390/biom11111603>

Forsythe HM, **Barbar** E. [The role of dancing duplexes in biology and disease](#). *Prog Mol Biol Transl Sci*. 2021;183:249-270. doi: 10.1016/bs.pmbts.2021.06.004. Epub 2021 Jun 30. PMID: 34656330.

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White KA, McEntire KD, Buan NR, Robinson L, **Barbar** E. [Charting a New Frontier Integrating Mathematical Modeling in Complex Biological Systems from Molecules to Ecosystems](#). *Integr Comp Biol*. 2021 Jul 20;icab165. doi: 10.1093/icb/icab165. Epub ahead of print. PMID: 34283225.

Loening NM, **Barbar** E. [Structural characterization of the self-association domain of swallow. Protein Sci](#). 2021 May;30(5):1056-1063. doi: 10.1002/pro.4055. Epub 2021 Mar 9. PMID: 33641207; PMCID: PMC8040862.

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Forsythe HM, Rodriguez Galvan J, Yu Z, Pinckney S, Reardon P, Cooley RB, Zhu P, Rolland AD, Prell JS, **Barbar** E. [Multivalent binding of the partially disordered SARS-CoV-2 nucleocapsid phosphoprotein dimer to RNA](#). *Biophys J*. 2021 Jul 20;120(14):2890-2901. doi: 10.1016/j.bpj.2021.03.023. Epub 2021 Mar 29. PMID: 33794152; PMCID: PMC8007181.

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From the *Cooley* group

Sluchanko NN, Tugaeva KV, Gushchin I, Remeeva A, Kovalev K, **Cooley** RB. [Crystal structure of human 14-3-3ζ complexed with the noncanonical phosphopeptide from proapoptotic BAD](#).

Biochem Biophys Res Commun. 2021 Oct 26;583:100-105. doi: 10.1016/j.bbrc.2021.10.053. Epub ahead of print. PMID: 34735870.

Bednar RM, Jana S, Kuppa S, Franklin R, Beckman J, Antony E, Cooley RB, Mehl RA. [Genetic Incorporation of Two Mutually Orthogonal Bioorthogonal Amino Acids That Enable Efficient Protein Dual-Labeling in Cells](#). ACS Chem Biol. 2021 Sep 30. doi: 10.1021/acscchembio.1c00649. Epub ahead of print. PMID: 34590824.

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From the *Beckman* group

Bednar RM, Jana S, Kuppa S, Franklin R, Beckman J, Antony E, Cooley RB, Mehl RA. [Genetic Incorporation of Two Mutually Orthogonal Bioorthogonal Amino Acids That Enable Efficient Protein Dual-Labeling in Cells](#). ACS Chem Biol. 2021 Sep 30. doi: 10.1021/acscchembio.1c00649. Epub ahead of print. PMID: 34590824.

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From the **Gombart** group

Logan IE, Shulzhenko N, Sharpton TJ, Bobe G, Liu K, Nuss S, Jones ML, Miranda CL, Vasquez-Perez S, Pennington JM, Leonard SW, Choi J, Wu W, Gurung M, Kim JP, Lowry MB, Morgun A, Maier CS, Stevens JF, **Gombart AF**. [Xanthohumol Requires the Intestinal Microbiota to Improve Glucose Metabolism in Diet-Induced Obese Mice](#). Mol Nutr Food Res. 2021 Nov;65(21):e2100389. doi: 10.1002/mnfr.202100389. Epub 2021 Oct 12. PMID: 34496124; PMCID: PMC8571065.

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From the **Hagen** group

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Rodríguez E, Radke A, **Hagen TM**, Blier PU. [Supercomplex organization of the electron transfer system in marine bivalves, a model of extreme longevity](#). J Gerontol A Biol Sci Med Sci. 2021 Dec 6;glab363. doi: 10.1093/gerona/gerona/363. Epub ahead of print. PMID: 34871395.

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From the **Hendrix** group

Eriksen RL, Padgitt-Cobb LK, Randazzo AM, **Hendrix DA**, Henning JA. [Gene Expression of Agronomically Important Secondary Metabolites in cv. 'USDA Cascade' Hop \(*Humulus lupulus*\)](#)

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From the **Johnson** group

Yan Q, Liu M, Kidarsa T, **Johnson** CP, Loper JE. Two Pathway-Specific Transcriptional Regulators, PltR and PltZ, [Coordinate Autoinduction of Pyoluteorin in *Pseudomonas protegens* Pf-5](#). Microorganisms. 2021 Jul 13;9(7):1489. doi: 10.3390/microorganisms9071489. PMID: 34361923; PMCID: PMC8305169.

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From the **Karplus** group

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Zagotta WN, Sim BS, Nhim AK, Raza MM, Evans EG, Venkatesh Y, Jones CM, **Mehl** RA, Petersson EJ, Gordon SE. [An improved fluorescent noncanonical amino acid for measuring conformational distributions using time-resolved transition metal ion FRET](#). *Elife*. 2021 Oct 8;10:e70236. doi: 10.7554/eLife.70236. PMID: 34623258; PMCID: PMC8500717.

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From the *Hsu* group

Zhang Y, Bobe G, Miranda CL, Lowry MB, **Hsu** VL, Lohr CV, Wong CP, Jump DB, Robinson MM, Sharpton TJ, Maier CS, Stevens JF, Gombart AF. [Tetrahydroxanthohumol, a xanthohumol derivative, attenuates high-fat diet-induced hepatic steatosis by antagonizing PPAR \$\gamma\$](#) . *Elife*. 2021 Jun 15;10:e66398. doi: 10.7554/eLife.66398. PMID: 34128467; PMCID: PMC8205491.

From the *Nyarko* group

Baker K, Kwok E, Reardon P, Rodriguez DJ, Rolland AD, Wilson JW, Prell JS, **Nyarko** A. [Yorkie-Warts Complexes are an Ensemble of Interconverting Conformers Formed by Multivalent Interactions](#). *J Mol Biol*. 2021 Feb 19;433(4):166776. doi: 10.1016/j.jmb.2020.166776. Epub 2020 Dec 28. PMID: 33383033.

From the *Perez* group

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From the *Qiu* group

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