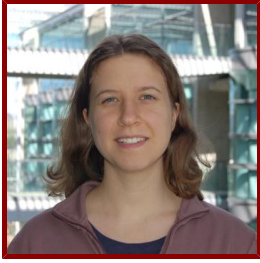


Stanford



Magdalena Crossley

Instructor, Chemical and Systems Biology

Bio

ACADEMIC APPOINTMENTS

- Instructor, Chemical and Systems Biology

HONORS AND AWARDS

- Stanford Cancer Institute Fellowship Award, Stanford University (July 2021 - June 2022)
- Fellow Award, Leukemia and Lymphoma Society (July 2016 - July 2020)

PROFESSIONAL EDUCATION

- PhD, University of Cambridge, Molecular Biology (2015)
- Master of Arts (Cantab), University of Cambridge, Natural Sciences (2014)

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Investigating the role of R-loops in genome instability and cancer.

Publications

PUBLICATIONS

- **Direct visualization of transcription-replication conflicts reveals post-replicative DNA:RNA hybrids.** *Nature structural & molecular biology*
Stoy, H., Zwicky, K., Kuster, D., Lang, K. S., Krietsch, J., Crossley, M. P., Schmid, J. A., Cimprich, K. A., Merrikh, H., Lopes, M.
2023
- **R-loop-derived cytoplasmic RNA-DNA hybrids activate an immune response.** *Nature*
Crossley, M. P., Song, C., Bocek, M. J., Choi, J., Kousorous, J., Sathirachinda, A., Lin, C., Brickner, J. R., Bai, G., Lans, H., Vermeulen, W., Abu-Remaileh, M., Cimprich, et al
2022
- **Relationships between genome-wide R-loop distribution and classes of recurrent DNA breaks in neural stem/progenitor cells.** *Scientific reports*
Thongthip, S., Carlson, A., Crossley, M. P., Schwer, B.
2022; 12 (1): 13373
- **Quantitative DNA-RNA Immunoprecipitation Sequencing with Spike-Ins.** *Methods in molecular biology (Clifton, N.J.)*
Crossley, M. P., Cimprich, K. A.
2022; 2528: 381-410
- **Catalytically inactive, purified RNase H1: A specific and sensitive probe for RNA-DNA hybrid imaging.** *The Journal of cell biology*
Crossley, M. P., Brickner, J. R., Song, C., Zar, S. M., Maw, S. S., Chédin, F., Tsai, M. S., Cimprich, K. A.

2021; 220 (9)

- **qDRIP: a method to quantitatively assess RNA-DNA hybrid formation genome-wide.** *Nucleic acids research*
Crossley, M. P., Bocek, M. J., Hamperl, S. n., Swigut, T. n., Cimprich, K. A.
2020
- **R-Loops as Cellular Regulators and Genomic Threats.** *Molecular cell*
Crossley, M. P., Bocek, M., Cimprich, K. A.
2019; 73 (3): 398–411
- **Faulty replication can sting** *NATURE*
Crossley, M. P., Cimprich, K. A.
2018; 557 (7703): 34–35
- **Targeting Functional Noncoding RNAs.** *Methods in molecular biology (Clifton, N.J.)*
Crossley, M. P., Krude, T.
2017; 1565: 151-160
- **Structural and functional analysis of four non-coding Y RNAs from Chinese hamster cells: identification, molecular dynamics simulations and DNA replication initiation assays** *BMC Molecular Biology*
Neto, Q. A., Junior, F. F., Bueno, P. S., Seixas, F. A., Kowalski, M. P., Kheir, E., Krude, T., Fernandez, M. A.
2016: 1
- **Co-transcriptional R-loops are the main cause of estrogen-induced DNA damage** *eLIFE*
Stork, C. T., Bocek, M., Crossley, M. P., Sollier, J., Sanz, L. A., Chédin, F., Swigut, T., Cimprich, K. A.
2016
- **Non-coding stem-bulge RNAs are required for cell proliferation and embryonic development in C-elegans** *JOURNAL OF CELL SCIENCE*
Kowalski, M. P., Baylis, H. A., Krude, T.
2015; 128 (11): 2118-2129
- **Functional roles of non-coding Y RNAs.** *The international journal of biochemistry & cell biology*
Kowalski, M. P., Krude, T. n.
2015
- **Nucleotide contributions to the structural integrity and DNA replication initiation activity of noncoding y RNA** *BIOCHEMISTRY*
Wang*, I., Kowalski*, M. P., Langley, A. R., Rodriguez, R., Balasubramanian, S., Hsu, S. T., Krude, T.
2014; 53 (37): 5848-5863
- **CXCL12/CXCR4 Blockade Induces Multimodal Antitumor Effects That Prolong Survival in an Immunocompetent Mouse Model of Ovarian Cancer** *CANCER RESEARCH*
Righi, E., Kashiwagi, S., Yuan, J., Santosuosso, M., LeBlanc, P., Ingraham, R., Forbes, B., Edelblute, B., Collette, B., Xing, D., Kowalski, M., Mingari, M. C., Vianello, et al
2011; 71 (16): 5522-5534

PRESENTATIONS

- The functional role of non-coding RNAs in DNA replication - University of Cambridge DNA replication, repair and recombination series (June 5, 2013)
- Non-coding stem-bulge RNAs are required for cell proliferation and embryonic development in the nematode *C. elegans* - Abcam Cell Cycle Club (October 29, 2014)
- Non-coding stem-bulge RNAs are required for cell proliferation and embryonic development in *C. elegans* - EMBO Conference Series (10/9/2014)