

# Stanford

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## Carolyn Turcotte

Postdoctoral Scholar, Developmental Biology

### Bio

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#### BIO

Carolyn Turcotte is a postdoctoral fellow in the Villeneuve lab that studies meiotic homolog pairing using an interspecies hybrid model system. She earned her PhD in Genetics and Molecular Biology at the University of North Carolina at Chapel Hill, where she worked in Jeff Sekelsky's lab and studied spontaneous meiotic nondisjunction in *Drosophila*.

#### HONORS AND AWARDS

- NIH F31 Fellowship, NIA 1F31AG074637, National Institute on Aging (2021-2024)
- NIH T32 Training Grant, NIGMS 5T32GM007092-45, UNC Chapel Hill (2019-2020)
- NSF Graduate Research Fellowship - Honorable Mention, National Science Foundation (2019)
- Barry M. Goldwater Scholarship, Barry M. Goldwater Foundation (2017)
- Genetics Society of America Undergraduate Travel Award, Genetics Society of America (2016 & 2017)

#### BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- GSA Peer Review Training Program, Genetics Society of America (2023 - 2024)
- Genetics Retreat Invited Speakers Committee, UNC Chapel Hill (2022 - 2022)
- Genetics Network Leader, UNC Chapel Hill (2021 - 2024)
- GMB Invited Speakers Committee, UNC Chapel Hill (2021 - 2021)
- UNC Fly Club Organizer, UNC Chapel Hill (2019 - 2023)

#### PROFESSIONAL EDUCATION

- Bachelor of Science, Marist College (2018)
- Doctor of Philosophy, University of North Carolina, Chapel Hill (2026)

#### STANFORD ADVISORS

- Anne Villeneuve, Postdoctoral Faculty Sponsor

### Research & Scholarship

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#### LAB AFFILIATIONS

- Anne Villeneuve (3/16/2026)

### Publications

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#### PUBLICATIONS

- **Chromosome-specific differences in the recombination landscape of spontaneous meiotic nondisjunction** *GENETICS*  
Turcotte, C. A., Sekelsky, J.

2026

- **Meiotic Crossover Patterning** *FRONTIERS IN CELL AND DEVELOPMENTAL BIOLOGY*  
Pazhayam, N. M., Turcotte, C. A., Sekelsky, J.  
2021; 9: 681123
- **A pathway for error-free non-homologous end joining of resected meiotic double-strand breaks** *NUCLEIC ACIDS RESEARCH*  
Hatkevich, T., Miller, D. E., Turcotte, C. A., Miller, M. C., Sekelsky, J.  
2021; 49 (2): 879-890
- **Maintenance of Genome Integrity by Mi2 Homologs CHD-3 and LET-418 in *Caenorhabditis elegans*** *GENETICS*  
Turcotte, C. A., Sloat, S. A., Rigothi, J. A., Rosenkranse, E., Northrup, A. L., Andrews, N. P., Checchi, P. M.  
2018; 208 (3): 991-1007
- **CRISPR Technology Reveals RAD(51)-ical Mechanisms of Repair in Roundworms: An Educational Primer for Use with "Promotion of Homologous Recombination by SWS-1 in Complex with RAD-51 Paralogs in *Caenorhabditis elegans*"** *GENETICS*  
Turcotte, C. A., Andrews, N. P., Sloat, S. A., Checchi, P. M.  
2016; 204 (3): 883-891