JOB# 16485  
Arizona State University  
School of Life Sciences  
Postdoctoral Research Scholar:  
Understanding Homologous Recombination in Maize

Position Description
The School of Life Sciences at Arizona State University invites applications for a full-time, fiscal-year appointment as a Postdoctoral Research Scholar. We are seeking a highly motivated postdoctoral fellow to participate in a research project aimed understanding the mechanisms of homologous recombination in maize with focuses on the higher order chromatin organization and its impact on the distribution pattern of recombination events. The postdoc will conduct research at ASU site in collaborating with researchers at Cornell University, the University of Minnesota, and USDA. The qualified candidate is anticipated to start on January 3rd, 2021.

Essential Duties
1. Conduct sample preparation for ChIP-seq, RNA-seq, and analyze sequencing data.
2. Isolate pollen mother cells for genomic, cellular, and molecular functional analysis.
3. Stage, fix, and prepare pollen mother cells for immunocolocalization, especially for the proteins involved in homologous recombination and chromosome configuration during meiosis.
4. Explore how environmental factors, such as heat and drought stress impact recombination and seed development.
5. Write scientific papers associated with the research.
6. Travel to meetings to present results and network with other researchers.
7. Participate and promote projects’ outreach by supervising students from the Summer Undergraduate Minority Mentoring and Internship Training (SUMMIT).
8. Be an active member in research group activities (e.g., participate in lab meetings, mentor students).

Minimum Qualifications
- Successful candidates must have at the time of appointment an earned doctorate in a relevant field, relevant publications in genetics, cell biology, and/or genomic studies by the time of appointment and demonstrated experience in at least two of the following areas: ChIP-seq, RNA-seq, chromosome biology, cellular biology, bioinformatics, protein immunocolocalization.
- Candidates must be within five years from receipt of their doctoral degree.
- Demonstrated success or evidence to work effectively in interdisciplinary teams, a strong record of scholarly achievement, and excellent communication skills.
Desired Qualifications

- The ideal candidate would have experience with plant systems, such as maize, rice, and Arabidopsis.
- Good skills on how to use fluorescence microscope, antibody work would be a plus.

Application Instructions

To apply, please submit electronically to http://apply.interfolio.com/79631 the following materials:

1. Cover letter and research interests. Applicants should describe experience and suitability for the position. Unlike a standard cover letter, this proposal should highlight the strengths of the applicant’s experience towards developing and implementing the proposed research.
2. Curriculum vitae or resume.
3. Contact information (name, email and phone) for two or three references.

Review of applications will begin on November 1st, 2020 and will continue to review bi-weekly until the position is closed.

A background check is required for employment.

Department information

The School of Life Sciences (SOLS) has provided a vital hub for creative excellence at Arizona State University, with more than 670 faculty, graduate students, postdoctoral fellows and staff, and research that ranges from studies on biodiesel and biohydrogen to vaccine development and the conservation of whales. As ASU’s first academic unit to fully reflect President Michael Crow’s integrated, interdisciplinary vision for the New American University, the School of Life Sciences offers active and evolving platforms for collaborative, cutting-edge research and faculty whose discovery is freed from traditional institutional boundaries.

Arizona State University is a dynamic, progressive university dedicated to interdisciplinary collaborations, to rethinking university education, and to integrating excellence in research and teaching. The university has been ranked #1 for innovation by the US News & World Report for the past five years. ASU’s School of Life Sciences is committed to curricular innovation in traditional and digital learning environments.

The College of Liberal Arts and Sciences (The College) at ASU values cultural and intellectual diversity, and continually strives to foster a welcoming and inclusive environment. We are especially interested in applicants who can strengthen The College diversity of the academic community.

About Arizona State University

Arizona State University is a comprehensive public research university named #1 in the United States for innovation for the second consecutive year, followed by #2 Stanford and #3 MIT. We measure our success not by whom we exclude, but rather by whom we include and how they succeed; advancing research and discovery of public value; and assuming fundamental responsibility for the economic, social, cultural and overall health of the communities we serve.
ASU’s School of Life Sciences is home to innovative teachers who are guided by educational access, student success, applied learning, and interdisciplinary inquiry. We understand there are many paths to achieving a university education, and we build undergraduate and graduate degree programs and pathways that are flexible and relevant for a rapidly changing world.

The College values our cultural and intellectual diversity, and continually strives to foster a welcoming and inclusive environment. We are especially interested in applicants who can strengthen the diversity of the academic community.

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Arizona State University is a VEVRAA Federal Contractor and an Equal Opportunity/Affirmative Action Employer. All qualified applicants will be considered without regard to race, color, sex, religion, national origin, disability, protected veteran status, or any other basis protected by law. ASU's full nondiscrimination statement (ACD 401) is located on the ASU website at https://www.asu.edu/aad/manuals/acd/acd401.html and https://www.asu.edu/titleIX/

In compliance with federal law, ASU prepares an annual report on campus security and fire safety programs and resources. ASU’s Annual Security and Fire Safety Report is available online at https://www.asu.edu/police/PDFs/ASU-Clery-Report.pdf. You may request a hard copy of the report by contacting the ASU Police Department at 480-965-3456.