



Chief Scientific Officer

- A unique opportunity to have high impact scientific and social impact
- Remote work with travel (~15%) to Guatemala
- Salary range: \$160-190,000
- Competitive benefits package

Summary of the Position

Semilla Nueva (New Seed) is recruiting a remote Chief Scientific Officer to oversee the strategic development of our biofortified maize breeding program and explore an expansion into the biofortification of wheat and rice via gene editing. This position will provide high-level direction of our conventional backcrossing and gene editing programs, manage partnerships with international research organizations and companies, such as CIMMYT, improve field operations for our conventional backcrossing program in Guatemala, and oversee the testing of new biofortified seeds through partnerships in Central America and Sub-Saharan Africa. The position will oversee 11 breeding staff, primarily based at our research farm and nutrition laboratory in Guatemala.

Summary of the Organization

Semilla Nueva develops high-yielding, climate-resilient maize seeds that have been conventionally bred to have higher levels of the most important missing nutrients: zinc, iron, and quality protein. Our approach to large-scale adoption of these seeds relies on four strategies:

1. Introgressing QPM, high zinc, and iron traits into competitive conventional hybrids, primarily from CIMMYT, which increase incomes and prevent crop losses for farmers who currently use older hybrid seeds or recycled Open-Pollinated Varieties (OPVs);
2. Piloting incentives or dedicated purchases for seed companies to profitably sell new, higher-yielding, climate resilient, biofortified seeds at prices the poorest of the poor can afford;
3. Working with governments and partnerships to institutionalize these markets, and
4. Developing gene editing strategies that enable mainstreaming of biofortified traits.

Our vision is to improve the nutrition of over 100 million people in the next ten years, primarily in Central America and Sub-Saharan Africa. Our seed was sold by over ten seed companies in 2025 in Guatemala and El Salvador, reaching over 55,000 farmers and feeding 1.4M people.

Qualifications

Required:

- PhD with experience or MSc with at least 8 years' experience in crop breeding or related field
- Demonstrated leadership in breeding-related operations including program design, field experimentation, data management, trial analysis & interpretation, grain and seed lab management and nursery/seed production
- Experience with strategy development and planning/optimization for conventional or genomics based breeding programs, as well as trait introgression
- Data analysis abilities
- Strong verbal and written communication skills

Desired:

- Fluent Spanish
- Experience in trait research and discovery
- Experience leading breeding efforts in maize
- Project and collaboration management

Specific Tasks

- **Optimize our backcross breeding program and improve field quality control**

Work with the Guatemalan team to design and implement quality control systems, field activity monitoring, activity protocols, planning systems, and dashboards related to the development of new backcrossed biofortified hybrids. Supervise the R&D director in the implementation of these systems once designed. Present and strategies, systems, and results to donors and technical partners and seek improvements. Work with the R&D director to develop improved backcross strategies, such as optimized donors, developing lower rot and larger grain QPM, and testing novel conventional genetics and mutants as trait donors. Oversee collaborations with international partners to field test new backcrossed hybrids.

- **Leadership team responsibilities**

Lead departmental budgeting, HR, planning, and reporting of results. Participate in the Semilla Nueva leadership team, including developing strategic plans for the organization, sharing results with donors, and representing Semilla Nueva with partners.



- **Oversee the expansion of our gene editing program**

Manage the gene editing lead who manages all our gene editing collaborations. Support them to establish new collaborations with companies, manage IP considerations, and expand the program. Collaborate on research, evaluation, and implementation of new breeding projects such as low-phytate maize, maize color modification, and other novel traits with significant potential impact for global health. Work with our gene editing lead to determine whether gene editing or traditional breeding is the best path to each target trait and coordinate to bring gene-edited materials into the breeding pipeline.

To apply please send your CV and a brief, 2-4 bullet point explanation of why you think you may be a good fit for us, and why we may be a good fit for you. Please send to KaseyMarkel@semillanueva.org with the subject, Chief Scientific Officer, and your last name.

Semilla Nueva is an Equal Opportunity Employer committed to sustaining a diverse community with a work environment that is welcoming, respectful, and encouraging to all. We foster a culture of inclusion that celebrates and cultivates diversity along multiple dimensions, including race, ethnicity, sex, gender identity, gender expression, sexual orientation, out of home care, age, national origin, socioeconomic status, religion, ability, culture, and experience.