



Dear Members of the Search Committee,

I am writing to apply for the Herbert Reich Chair of Natural Science, specialty in life sciences, at Deep Springs College. The College's mission, integrating rigorous academics, labor, and self-governance, resonates deeply with both my professional commitments and my personal ideals. In many ways, this role represents a rare convergence of my two deepest passions: living and working in isolated, close-knit communities, as I have for years in remote research sites throughout southern Africa, and cultivating transformative learning through teaching and mentorship. I did not think it was possible to find a position that so fully unites these elements.

For over a decade, I have built an independent research program centered on lion behavior and ecology, carrying it across institutions and expanding it through competitive awards. Since 2016 I have been a Research Associate at the Lion Research Center at the University of Minnesota, and in 2021 I joined the Max Planck Institute of Animal Behavior with an independent project funded by the competitive Collaborative Research Grant (CRG). I also serve as a project leader at the University of Konstanz's Centre for the Advanced Study of Collective Behavior, and in 2025 I was awarded a ZENiT Research Fellowship at the Zukunftscolleg. These positions reflect both my independence as a scholar and the recognition my research program has received at international institutions. My work has also been consistently supported through competitive fellowships and third-party grants, including NIH and NSF doctoral fellowships, a McKnight Doctoral Fellowship, and awards from National Geographic, the Cluster of Excellence in Collective Behavior, and most recently the ZENiT Fellowship. Importantly, the research program I developed has remained my own intellectual program throughout these transitions, and since joining MPI I have expanded it significantly through new technologies, collaborations, and funding streams.

My research investigates how ecological gradients and social dynamics shape cooperation, behavioral plasticity, and human–wildlife conflict. By combining biologging (GPS, accelerometry, magnetometry, and audio) with direct observation and Indigenous tracking knowledge, I study how lions adapt across ecosystems from deserts to savannahs to coastal habitats. This work not only advances theory but also links directly to conservation practice through collaborations with NGOs that mitigate livestock depredation. Students at Deep Springs could readily engage with these themes through independent projects, data-driven case studies, or applied conservation analyses, connecting local ranch work to global ecological challenges.

I have disseminated this research broadly, through both scholarly and public channels. I have authored or co-authored more than 15 peer-reviewed papers, including early studies that provided the first demonstrations of problem solving, learning, memory, and cooperation in lions (Borrego & Gaines 2016; Borrego & Dowling 2016; Borrego 2020). This body of work also formed the basis of the Smithsonian Channel documentary *Predator Challenge* (later released on Netflix), which featured my research on the evolutionary links between cognition and social complexity. Together, these outputs underscore my commitment to advancing knowledge while also engaging wider audiences, and they equip me to mentor students not only in scientific inquiry but in the clear communication of ideas, skills central to leadership and civic engagement.

Alongside research, I bring significant teaching and mentoring experience. I taught as a Visiting Assistant Professor in the Department of Natural Sciences at Baruch College and as a Post-doctoral Teaching Fellow at the American University in Cairo, where I designed and delivered courses in ecology, animal behavior, and conservation biology. I have also supervised students in independent research, including a master's thesis on innovation and behavioral flexibility in lions and snow leopards that culminated in a peer-reviewed publication and the student's progression to a doctoral program. Across these experiences,



I have developed a pedagogy rooted in discovery-driven learning, cross-disciplinary dialogue, and individualized mentorship, an approach ideally suited to the small, seminar-style classes at Deep Springs.

The opportunity to teach classes of no more than ten students is one of the most exciting aspects of Deep Springs. Such intimate settings make it possible to tailor instruction to individual needs and interests, whether through one-on-one mentoring, directed readings, or student-designed projects. At Deep Springs, I envision blending structured curricula with student choice, allowing each class to evolve dynamically in response to the community's intellectual energy. I am equally excited to meet the expectations of the College's labor pillar: contributing to ranch and farm work, shared community tasks, meals, and gatherings, and living on site as part of the community.

I am prepared to teach a wide range of courses at Deep Springs, from foundational classes in General Biology, Ecology, Environmental Science, and Zoology to advanced seminars rooted in my expertise. Potential offerings include *From Animal to Man: The Evolution of Intelligence*, which examines the ecological and social drivers of cognition across species; *Ethics, Welfare, and Conservation*, which uses case studies to interrogate the trade-offs at the intersection of science and ethics; and a field-based course, *Ecology & Adaptation in Desert Systems*, which leverages the unique ranch setting to explore ecological methods, behavioral plasticity, and adaptation under resource constraints. Each course would balance rigor with flexibility, combining seminars, fieldwork, and student-led projects in ways that align with the College's emphasis on discovery, responsibility, and community engagement.

My years living in remote tented camps (particularly my primary site in the Central Kalahari, Botswana) have closely paralleled, and in many ways exceeded, the remoteness of Deep Springs. In camp we rely on limited solar electricity, ration scarce water, and often go days without internet access, with the nearest town five hours away. Far from hardship, I have found deep joy in this way of life. I thrive in environments where resilience depends not only on practical skills but on the strength of a small community, where work, meals, and personal life are fully shared. This experience has instilled in me the importance of collaboration and mutual support, values I see reflected in Deep Springs' model of labor, community, and self-governance. It also means I come uniquely prepared, and genuinely eager, not only to contribute to the isolated but intensely collaborative environment of the College, but also to support students as they navigate their own transition into this distinctive way of living and learning.

I would look forward to contributing to the interdisciplinary life of the College by working closely with the permanent Chairs in the Humanities and Social Sciences. Much of my research sits at the interface of science and society: studies of cooperation and human-wildlife conflict raise ethical questions about resource use and governance, while my collaborations with San trackers highlight the cultural dimensions of ecological knowledge. At the same time, my biologging work creates natural bridges to the physical sciences, inviting students to think critically about data, technology, and measurement. These intersections position me to connect natural science to broader humanistic and social concerns, helping students see ecology as part of a wider conversation about culture, ethics, and society.

To me, the Herbert Reich Chair represents not just a position but the fulfillment of what might elsewhere be dismissed as quixotic: the integration of meaningful scholarship, shared labor, and community life guided by self-governance. Deep Springs makes this vision real, and I am eager to contribute a strong research program, broad teaching experience, and the perspective gained from years living in remote desert camps to support the growth and leadership of its students.

Sincerely,

A handwritten signature in dark ink, appearing to read "Natalia Borrego".

Natalia Borrego, PhD