

## Cover Letter

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Search Committee  
Deep Springs College  
Big Pine, California

Dear Members of the Search Committee,

I am writing to apply for the Herbert Reich Chair of Natural Science at Deep Springs College, beginning August 2026. With a Ph.D. in Botany (defended 30<sup>th</sup> July 2025) from Christ University, Bangalore, and teaching and research experience across both laboratory and field contexts, I am eager to contribute to Deep Springs' distinctive educational mission that unites academics, labor, and self-governance.

During my doctoral research, I conducted extensive ethnobotanical fieldwork in Bankura District, West Bengal, documenting traditional healing practices and medicinal plants while also assessing their antioxidant properties. This experience has strengthened my ability to integrate rigorous scientific inquiry with real-world ecological and cultural contexts—an approach I see as deeply resonant with the College's emphasis on place-based learning. Complementing my fieldwork, I have a strong laboratory background. As a teaching assistant, I supported courses in **immunology, plant physiology, biochemistry, and human genetics**, guiding students in hands-on laboratory practices and developing my own skills as a mentor in small-class settings. My academic training also includes an **M.Sc. in Botany with a specialization in Bioinformatics**, where I worked extensively with molecular docking, computational tools, and phytochemical analysis. This foundation enables me to design courses that bridge classical botany with contemporary computational biology, helping students appreciate the breadth of modern natural science. Across my work, I strive to engage students in both specialized and interdisciplinary perspectives, encouraging them to connect their scientific learning to wider questions in the humanities and social sciences. Beyond teaching and research, I am committed to the communal ethos that defines Deep Springs. I am drawn to the idea of living and working closely with students and colleagues in a self-reliant community, contributing not only to academics but also to shared meals, projects, and meaningful dialogue. My previous conference presentations, publications, and a recently published patent on a **herbal composition for bone tissue regeneration** reflect my dedication to scholarship that is both innovative and impactful, while also providing avenues to involve students in ongoing scientific inquiry.

I would be honored to bring my background in plant sciences, ethnobotany, bioinformatics, and teaching to Deep Springs College. I believe my experiences prepare me to maintain and enrich the College's scientific laboratory and collections, design interdisciplinary courses in the natural sciences, and support students as they navigate the three pillars of the College.

Thank you for considering my application. I look forward to the opportunity to discuss how my teaching, research, and commitment to collaborative community life can contribute to Deep Springs.

Sincerely,  
Dr. Aratrika Bhadra

## REFEREES:

1. Dr. Manjunath BT (PhD Supervisor)

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CHRIST (Deemed to be University), Bangalore  
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2. Dr. Tathagata Ray Chaudhuri

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3. Dr. Saikat Basu

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