Dear Editor

Research depends on talented people with bright ideas more than anything else. Preserving the turnover of skilled and fresh researchers can help a research center move toward its goals more strongly. We conceptualized a model for recruiting junior volunteer researchers and organized an innovative event titled “Proposal School” to address this issue. It was an incubator and accelerator for students and post-graduates interested in orthopedic research. This first-coming two-month program included high-standard theoretical education, practical tutoring to help create an actual proposal, faculty supervision, and blinded faculty reviews. During this program, we hosted 94 junior researchers from 25 universities across the country. Twenty-two hours of educational content were provided to 88 people. Forty-five junior researchers developed 18 proposals, 11 of which were accepted and recruited for grants. In this article, we will share our experiences with our colleagues as a source of inspiration for their future plans.

Medical research requires skilled and dedicated researchers who can produce innovative ideas. One of the often-neglected resources is volunteer junior medical researchers (VJMRs). They can act as cost-effective part-time staff, but only if the organization can provide well-defined programs to identify and nurture their talent.

Doshi et al. have previously proposed a five-stage model for recruiting volunteer researchers, which included discovering, selecting, digging in, validating, and volunteering. This model helped individuals gradually become more involved in the recruitment process.

Inspired by this model, the Center for Orthopedic Trans-Disciplinary Applied Research (COTAR) recently organized an innovative program called “Proposal School”. The objective of this event was to nurture the talents of students and post-graduates who were interested in orthopedic research. The goal was to bring together a network of junior researchers who were both educated and proficient.

We formed a focused group discussion with the participation of faculty members, senior researchers, and junior researchers. A six-stage model was designed, which included discovery, enrollment, education, application, selection, and implementation stages [Figure 1]. The event was advertised on popular social networks, and everyone could sign up for it. The program consisted of three modules, including Theoretical, Practical, and Competition [Figure 2].

The Theoretical module was a five-week educational course providing participants with a theoretical background. It consisted of six sessions on general topics and six sessions on how to design and develop a standard research proposal. The sessions were hybrid, and their recordings were uploaded for later use. Feedback was collected through online satisfaction forms, and any issues were addressed promptly.

The Practical module involved participants in the actual research design. Participants chose an idea, formed teams, and linked with their faculty idea owner and mentor. The teams worked on designing and creating a research proposal for five weeks. Every week, they had to write a section of the standard proposal format and submit their assignments over the weekend. Feedback was collected through online satisfaction forms, and any issues were addressed promptly. All activities of this module were handled virtually via Telegram groups.

The Competition module incentivized high-quality work. All participants could enter their proposals into a competition, and the best three were awarded prizes and certification. In addition, proposals recognized as “qualified” received COTAR’s grant and were submitted for starting the project.

In the Theoretical module, nine faculty members instructed 88 VJMRs, and 22 hours were spent on education, with a mean satisfaction score of 88/10. In the Practical module, 21 teams of 44 VJMRs were supervised by nine mentors. In the Competition module, 11 out of 18 proposals (with a mean score of 215/264) were recognized as “qualified” and received grants. The detailed satisfaction assessment results can be found in [Table 1].

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LETTER TO THE EDITOR

Training and Recruitment of Volunteer Junior Medical Researchers: the Experiences of an Innovative Fast-Track Internship Program

Figure 1. Volunteer junior medical researcher recruitment funnel model

Figure 2. Event calendar including modules, topics, and assignments
In conclusion, COTAR has successfully piloted a model for recruiting VJMRs by running a three-module program called “Proposal School”. This program can serve as a reference for similar research institutes looking for cost-effective and energetic human resources.

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References