

YSSP Projects: Preparing for Success

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Putting together a successful YSSP project is often akin to preparing a sophisticated dinner menu. Both benefit from careful planning, a good match of available skills and actual requirements, determination and diligence, some ingenuity, and an inspired vision of the final product.

YSSP projects are at the same time wonderful opportunities and formidable challenges. Like any piece of innovative research, they can be highly unpredictable. A promising plan, even if well conceived at the outset, might simply crumble in the face of a few unexpected findings. Or, what may have initially seemed a solid and unequivocal research pathway may open up surprising vistas toward even more exciting destinations. But the truly taxing aspect of these projects is their length. Three months is not an awfully long time in which to pack the choice of a mutually attractive subject, training in some specific skills or techniques, the unfolding of the required research, and the production of some tangible output—as well as participating in the unique social environment for which IIASA's summer program is justifiably famous.

Yet it works, often amazingly well. One reason, I think, is that some critical self-selection among the participants works to the advantage of the summer program. The young scientists who come to IIASA are keenly interested in going abroad, engaging in international collaboration, and working and living together with other students and scientists from around the world. Many of them bring a high degree of commitment to the program and a combination of salient talents. A second reason for its success lies in the preparation. When scientists at IIASA and candidates for the YSSP can orchestrate a research agenda through a process of mutual information and

discussion, and if the young scientists then familiarize themselves with the necessary background before they arrive, most of the summer can be spent focusing on the actual work.

Perhaps the most important reason for the continuing success of the YSSP stems from the synergies it helps to create. Many participants join the program equipped with scientific questions, skills, and outlooks that are healthily different from the platform IIASA has available in-house. Combining these components then has the potential to create a whole that is more than the sum of its parts. Here, the brevity of summer projects is actually key: whereas conventional PhD projects can be (and often are) built solely around the scientific enthusiasms of their supervisors, many fine YSSP projects regularly arise from a more cooperative approach, in which two only partially overlapping sets of expertise are fruitfully pooled. In the past few years, such fortunate constellations have enabled, for instance, our Adaptive Dynamics Network Project to expand its expertise in areas as diverse as modeling fish stocks and fisheries, investigating the ecology and evolution of structured populations, and studying plant–herbivore interactions or speciation by sexual selection, to mention just a few prominent examples. Longer-term affiliations of former YSSP participants with IIASA then ensure that the most thriving of these collaborations can be continued.

Returning to the dinner-menu analogy, it is clear that, as usual, the proof of the pudding is in the eating. For those involved in the YSSP, both participants and supervisors, this involves not only expanded horizons, but also happy memories of the collaborative process itself. First and foremost, this means sharing the results of fruitful summer projects with the wider scientific community in the form of publications. This step is not only important for IIASA as an institution; it is also becoming increasingly vital for the participating young scientists. At least in science, PhD theses compiled from articles published in international peer-reviewed journals are becoming the worldwide standard (sweeping away conservative rules that oblige candidates to produce little-read monographs in their national language). In support of this trend, IIASA's summer program has already led to many a good PhD chapter, and has thus allowed young scientists to visibly demonstrate the skills and experience they have gained in the art of international scientific collaboration.



Ulf Dieckmann (left) with YSSP Vice-Dean Zig Klimont.