## ALAN E. LEVITON STUDENT RESEARCH AWARD REPORT



The Evolution of Competitive Mimicry
in Indonesian Orioles (Oriolus spp.)
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Neil Losin is one of two recipients of the 2008 AAAS, Pacific Division Alan E. Leviton
Student Research Awards. Greg Grether is his faculty advisor.

In the summer of 2008, using funding from the AAAS Pacific Division, I spent one month conducting pilot research for a project entitled "The evolution of competitive mimicry in Indonesian orioles (*Oriolus spp.*)." With a field assistant, I visited three islands in eastern Indonesia with the goals of finding, observing, and making audio recordings of the islands' friarbirds and orioles (Seram: *Philemon subcorniculatus* and *Oriolus forsteni*; Tanimbar: *P. moluccensis* and *O. bouroensis*; New Guinea: *P. novaeguineae* and *O. szalayi*).

Unfortunately, we had very little luck finding orioles. On Seram, we found good-quality primary forest, and friarbirds were abundant even in marginal habitat. We observed about forty bird species during a week of intensive searching, but we did not find any orioles. We stayed for three nights in the coastal village of Sawai, and three more nights inland at Kembali Bebas, a center for the rehabilitation and release of parrots seized from smugglers.

Next, we visited the island of Yamdena in the Tanimbar archipelago. We stayed on a farm near the village of Lorulun. Nearby were forests of varying quality. It rained extensively for much of the week we spent there, but we were able to search for birds for at least part of every day. We found friarbirds right away, and we heard occasional vocalizations reminiscent of orioles, but it was not until our final day (after we had already scheduled our departure) that we finally saw our first oriole. Although I had expected a resemblance between oriole and friarbird, the similarity between them was striking. I had time for just one photograph of the oriole and no audio recording before it flew off and could not be relocated.

Finally, we visited Batanta island, in New Guinea's Raja Ampat archipelago. Here we found three orioles in the first two days of searching, then had no further sightings. While orioles seemed more common here than on the other islands, the resemblance between them and the local friarbirds was not nearly as striking as on Yamdena.

I was surprised and disheartened to find that the orioles were so scarce, at least at the sites I visited and at the time of year I was able to visit. I had chosen the sites I visited based on extensive correspondence with scientists and birders, including recent accounts of the habitat quality and records of orioles seen there. I am a very experienced birder and I have plenty of practice finding birds by sight and sound in dense tropical forest vegetation. It is possible that had I visited at a different time of year, the orioles would have been more common, or that other sites on the same islands would have been more productive.

As a result of my unsuccessful attempts to find orioles (they certainly were not abundant enough for me to perform the behavioral experiments or even the observational studies I envisioned), I have abandoned this project for now.



*Oriolus bouroensis*: My only photograph of Yamdena's endemic oriole, which eerily resembles the local friarbird, *Philemon moluccensis*.



Wilson's Bird of Paradise: A local guide showed us the display court of this spectacular bird of paradise, endemic to Batanta and a couple of nearby islands.