Joining the Bird Ecology Lab

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What kind of lab is this?

The lab is a highly interactive space where people engage across disciplines — acoustics, molecular biology, GIS, and more. Many projects are collaborative, within the lab and outside. Fieldwork and paper discussions are often joint. If you function better working alone, the lab environment may not be the best fit for you. Do visit and read through the lab website.

We also host lab visitors who come from other institutions with their own projects and funding.

Our philosophy

In ecology (and our lab), people are always the ends, never the means. When we take on a student, it is not just because we need a specific result — it is also because the student will benefit from doing that work.

The work environment is fairly light, allowing for people to pace themselves. Targets are often self-set and people who join are self motivated (who do not need to be told what to do).

This is also a reflection of the work we do. Nobody's life depends on the precise number of breeding pairs of the White-bellied Shortwing recorded in a given season. Unlike medicine, ecology has no clinical output in the strict practical sense. What matters is the process: the development and methods, the training of minds, the creation of people who know how to think about hard problems. Of course we love thinking about birds, their lives (& their hard problems)!

Lab culture

Volunteerism and shared responsibility

Beyond your own research, lab membership means looking out for broader things that need doing — managing field activities, equipment, vehicles, field assistants, finances, and mentoring others. No one will assign these tasks. A lab member looks around, and if something needs to be done, they volunteer and take ownership.

If you are someone focused exclusively on your own project, this lab may not be the best place. We call the exclusive self-focus the 'lone ranger' model — certainly successful, but we do things differently here. Emotional intelligence, not just academic ability, is what we look for.

Honesty and communication

We appreciate being honest and direct, while remaining polite. If you are new and find it difficult to raise things formally, find informal avenues — over coffee, badminton, or lunch — to bring up ideas or issues. Scheduling a meeting with someone in the group is always a professional option. If something is affecting your work, it is not out of bounds for discussion.

Roles, engagement, and salary

The lab follows a progression of engagement. You can join at any stage, depending on where you are at. Each stage has different expectations of skills, responsibilities, and compensation. Below is what each role involves and what you should list on your CV.

Most openings are listed at the YETI mailing list https://www.freelists.org/list/meetyeti

Lab Intern

Lab Intern — **Unpaid** · *Rs 100/day contribution for shared food expenses while on field trip*

We train many interns as a service to the broader student community. Most interns at this stage have limited prior experience with the tools we use. Engagement is typically a few months. No minimum qualification, but this is not for school students. *[Prior experience expected at this stage is birding and engaging with natural history that you must have got in school or college, or out exploring - when you write in, please include specifics of what you have got done]*

Paid Intern

Paid Intern — **₹12,000/month** — *this category is closed from 2024 summer*

A small number of unpaid interns, once trained, progress to a short paid engagement (1–3 months). At this stage you are proficient in field techniques and can handle a field team independently. Maximum engagement: 1–1.5 years.

Term to describe yourself on your CV: Paid Intern

Field / Technical Assistant

Field/Technical Assistant — **₹20,000/month** · *Rs 100/day contribution for shared field food while on field*

Selected through an open interview against other applicants, and employed formally by IISER Tirupati. You are expected to carry greater field responsibilities, and will gradually be exposed to analytical tools and small research project design. A successful position results in at least one publication. Engagement should not exceed 1–1.5 years.

This is often an entry point into the lab. Most masters and undergrads from India do not have advanced research skills and this is the place to hone them.

Term to describe yourself on your CV: Project Student

(note: the formal IISER term is Field/Technical Assistant, but list yourself as Project Student on your CV)

JRF / Project Associate

JRF / Project Associate — **₹36,000/month** · *Rs 100/day contribution for shared field food while on field*

These positions are limited and competitive, selected by interview. At the JRF stage, students are expected to conduct highly independent research: executing project goals, designing small projects, running analyses, writing, and publishing papers. This stage also carries some administrative responsibilities for the project.

For career progression, Robin helps students find placements in other labs for PhD or employment. This stage ideally should not exceed 2–3 years, with at least 1–2 lead-author papers.

PhD applications from within the lab are encouraged at this stage, but require extraordinary motivation, an ability to raise funds, and a close match with the lab's research directions. Fellowship (CSIR/UGC) and publications matter more than exam ranks or medals. What matters most is understanding field ecological research and the temperament to do it.

PhD

PhD — **Salary is not the priority at this stage** *Rs 100/day contribution for shared field food*

A 5-year commitment and a genuine grind. Robin tries to ensure a close personality match between the student and the lab before entry [ascertained through interactions and in-person meetings / engagement in the lab in one of the stages described above]. The expectation is that students come ready to engage: raise grants, collect data, manage field logistics, run analyses, write papers. Aim to complete in 4 years; 5 is the realistic target.

PhD students are treated as junior colleagues — with respect for their opinions and ideas.

When should I start a PhD?

Start when you have the skills/tools and some questions (please see the flowchart at the end). The questions need not be final. Skills/tools in this lab are a) acoustics (if you have experience working with sound files, analyses), b) phylogenetics (lab skills, building trees, genomic data analyses through command line), c) GIS (any map-based analyses) or general ecological research integrating some field biology with any advanced tools.

A flowchart is below to help you think through the timelines and stages.

Why is this like this? The IISER PhD programme does not provide time to explore questions from scratch. That exploration must happen before entry. Start the programme only when your three chapter ideas are clear and you can hit the ground running.

If you want an international perspective, read sections 1 to 4 in this document https://www.cs.princeton.edu/~arvindn/advice/ on advice whether to do a PhD, what research projects to choose etc.

Who gets into a PhD?

There is no gatekeeping beyond the above eligibility. Anyone who aligns with the lab's goals and has shown progress through stages 1-4 of the research process with 3 clear chapter ideas can move to PhD. These chapter ideas can be broad, and can change, but clarity (driven by experience & knowledge) is what is expected at this stage. A publication is a strong asset. A national exam qualification (ideally UGC-CSIR fellowship) or GATE Ecology is required.

Should I do a PhD in the US/abroad, or in India?

This is often a mix of personal and professional goals (apart from peer pressure).

PhD abroad is for some students also a way out of India's social systems, or the prospect (misunderstood) of earning in dollars. If that is a factor, no Indian programme will be an equivalent alternative.

The US system offers substantial training value: time, coursework, and structured self-development. Europe is more project-oriented and shorter, similar to Indian systems. If training is your goal, the US (or Australian) system is better. Within the US, aim for better schools; many strong Indian institutions compare favourably to random US universities.

The advantage of an Indian PhD is the direct connection to the Indian system and its biodiversity, which helps build forward towards an academic career here.

A strong lab in a good US university, with funding, is generally better than most Indian options, with the exception of places like CES, IISc.

If you have to take a loan to go abroad – think twice; ecology is not an MBA that will earn your money back! The Indian PhD system pays you to do the same thing!

Also please consider the latest immigration rules - currently U.S. Department of Homeland Security (DHS) has limited J1/F1 Visa status to 4 years. E,g, https://www.lsu.edu/global-engagement/students/campus/ds_updates.php

When should I consider IISERT (Robin group)?

Our lab at IISER Tirupati offers fairly good project training in specific fields around biogeography and bioacoustics research.

But, we do not have course work to match up with the top schools. We try to match up/make up for this through workshops and formal interactions with other peers.

Our grad students work collaboratively, and are often connected with leaders in the field - hence the best research exposure is guaranteed.

PhDs who finish here are globally competitive.

You should talk to students who have worked here (current and alumni) to understand this better www.skyisland.in/people

Where else in India?

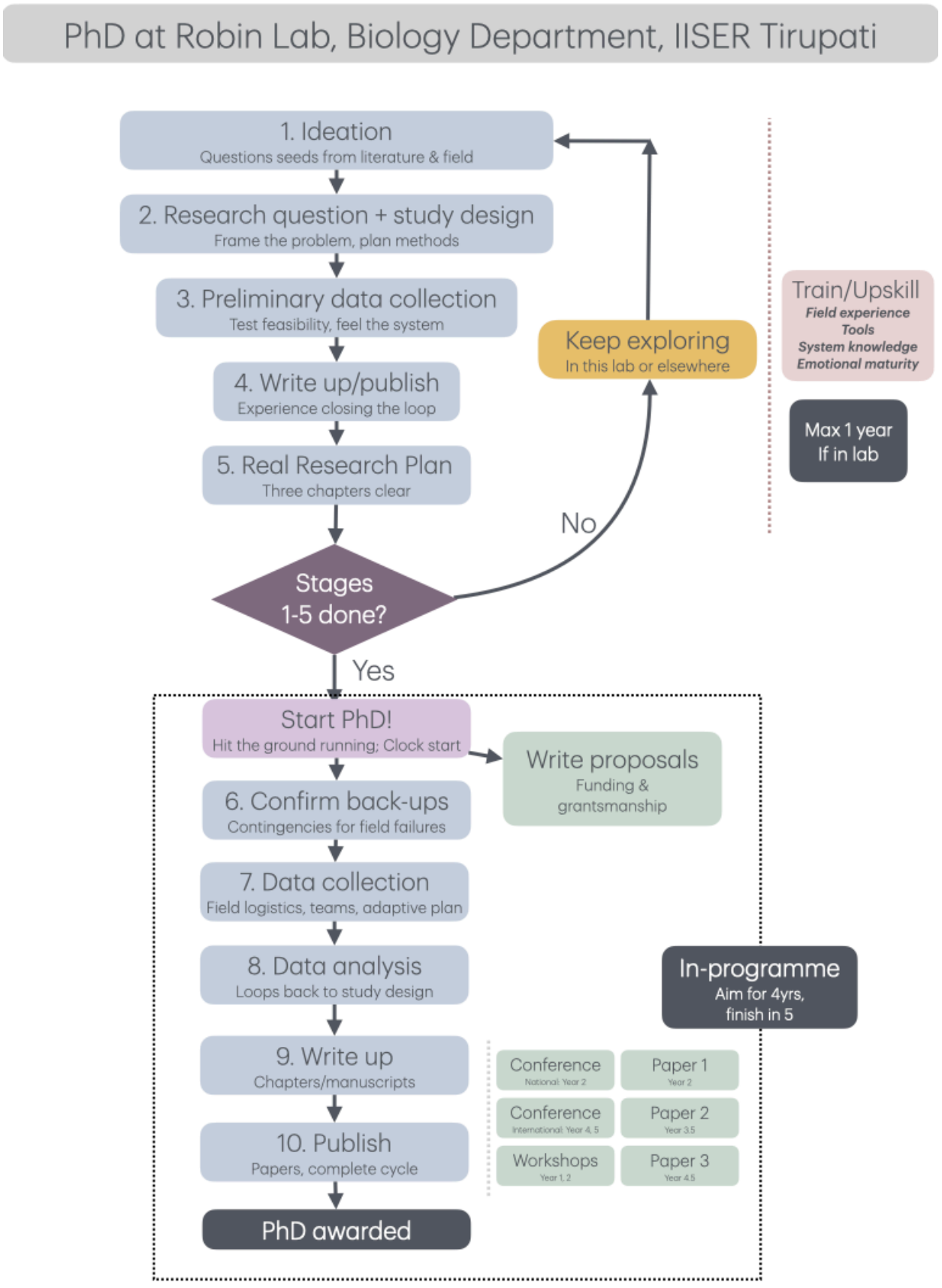
Depends on the system of research and the university. Please check ongoing projects. Cracking the CSIR-UGC exam is a strong way to get offers from multiple groups.

Do check career advice from peers here https://www.ornithology.in/career-advice/

This website also has a listing of potential faculty advisors in Ornithology.

Post-doctoral Researcher

Postdoc — **1–2 year engagement** · *Mostly independent*

Postdocs work largely independently, with discussions on a bi-weekly or monthly basis. The major goal is progression toward independent faculty positions. At this stage, postdocs function as colleagues in the lab. They will co-mentor students are run parts of the lab independently.

Flowchart to help think through PhD stages