Consensus

How to Start a Literature Review in a New Field: A PhD Student's Guide

A focused, paper-by-paper workflow for entering a new research field, understanding the literature, and identifying where your own work might contribute.

RESEARCHER SNAPSHOT

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When you enter a new field, it is easy to read paper after paper without feeling that you truly understand the literature. This guide offers a more focused approach: begin with a handful of papers, study them one at a time, ask questions as you read, and preserve what you learn in your own words.

The workflow comes from Ann Mariya Sunil, who developed it while learning her adviser's area of stochastic optimization during the first year of her PhD at Virginia Tech. By following her method, you can move beyond collecting papers toward understanding how they relate, which ones are worth returning to, and where your own research might contribute.

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1. Ask Someone in the Field for a Small Starting List

Before searching broadly, ask your adviser, a professor, a senior lab mate, or another researcher in the field to recommend five to ten foundational papers. Ann's adviser created this starting point for her, then introduced more advanced work as her understanding grew.

> ANN'S WORKFLOW · 1 OF 7
>
> "He didn't give me the big task of 'go and find your own papers.' He simplified it down to five or ten papers for me in the beginning. Once I understood one, he'd give me a slightly more advanced one."
>
> Ann Mariya Sunil · PhD student at Virginia Tech

If you do not have someone to ask, use Consensus to find a similarly concentrated set of foundational and highly influential papers in your subfield. The goal is not to identify every relevant paper immediately. It is to find a manageable entry point into the field. Save these starting papers as a Collection in My Library to keep your initial reading list focused and easy to return to as your understanding develops.

Save Your Starting Set in Consensus

Open My Library using the bookmark icon, select New Collection, and name it for your research area. As you find relevant papers, use the bookmark icon to save five to ten of them to the Collection.

2. Keep One Paper in Each Thread

Once your starting papers are saved to a Collection, create a separate Thread (chat) for each paper you read.

> ANN'S WORKFLOW · 2 OF 7
>
> "Each paper should be its own chat. Don't mix papers together. You won't remember which paper an answer came from. I'd stay focused on one paper for two or three days, finish it, then start a new thread for the next one."
>
> — Ann

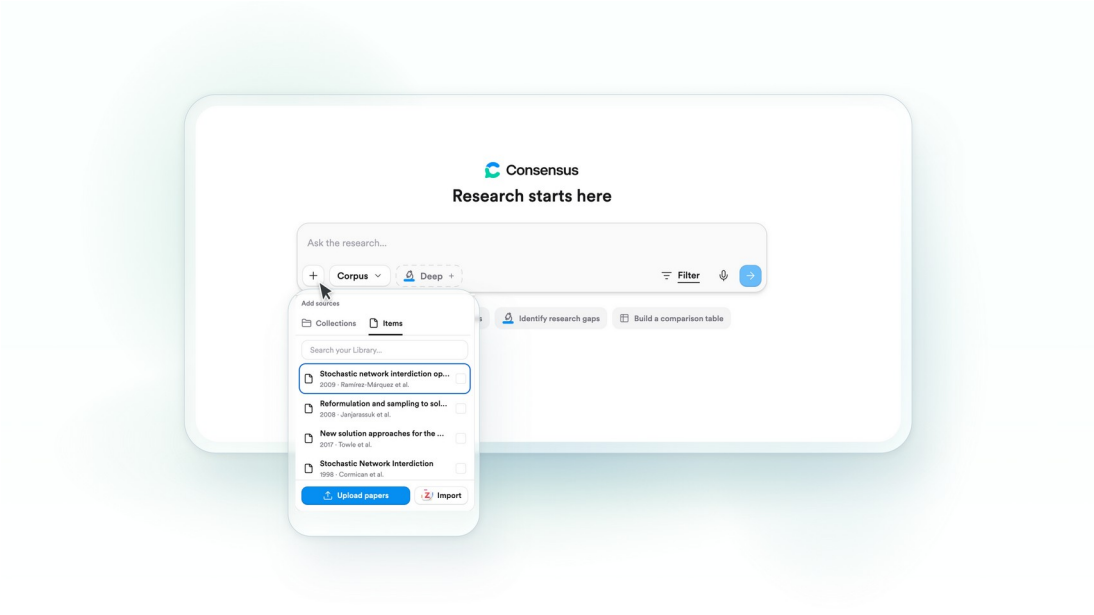
Treat every source as its own conversation. Keeping each paper in a separate thread makes it easier to remember which study an explanation came from. Once you understand the papers individually, you can compare them without mixing up their methods or findings.

Start a Thread with one paper in Consensus

From your Collection

1. Open My Library using the bookmark icon in the left sidebar.
2. Open your literature review Collection.
3. Find the paper you want to read and select Ask.

This starts a new Thread using only the selected paper as its source. *You can also upload the paper into your Library by selecting the "+" icon from the search bar.



3. Get the Summary Before You Start Reading

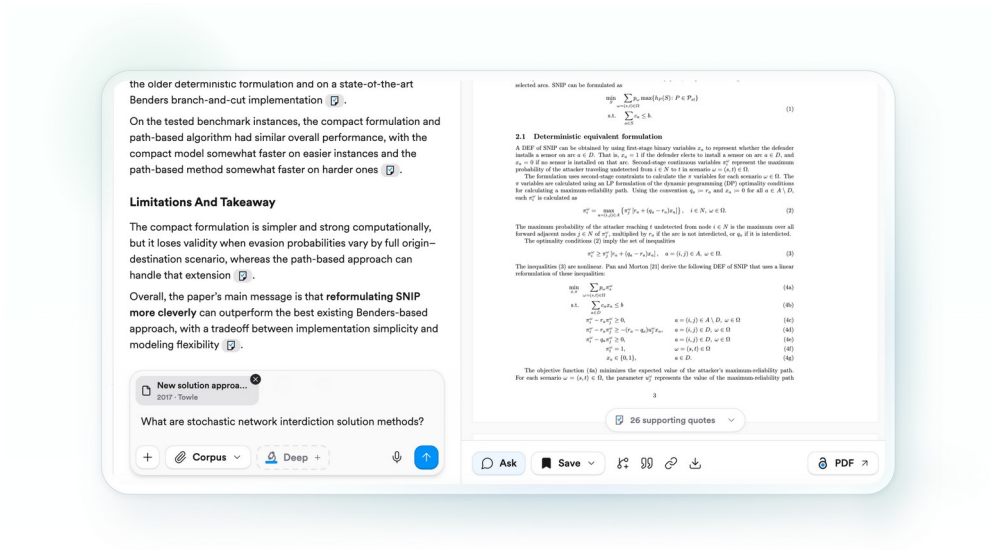
Before diving into a new paper, Ann asked for a summary so she knew what she was walking into.

> **ANN'S WORKFLOW · 3 OF 7**
>
> "The first thing I'd do was upload the paper and ask for a summary, just so I knew what the paper dealt with. Then, once I started actually reading, I'd ask specific questions as they came up."
>
> — Ann

The summary is orientation, not a substitute for reading. It gives you a map of the paper's central question, method, and findings before you work through the full argument. Ann then read the original paper section by section, keeping the thread open beside her and stopping whenever she reached something she did not understand.

4. Ask Questions as Soon as You Are Confused

Ann never forced herself to finish a paper before clearing up confusion. She treated reading as a back-and-forth conversation. Her most common questions were about jargon, real-world applications, and especially the mathematics.



ANN'S WORKFLOW · 4 OF 7

"The moment I hit a doubt, I'd ask right then, clear it up, and move to the next section. I'd even note, 'I'm on section two, paragraph three, and here's what I don't understand.'"

WHAT SHE ASKED ABOUT

"Whenever there was an unfamiliar term, I'd ask what it meant and where it was actually used. The math was where Consensus really helped me."

— Ann

5. Record Answers and Insights in Your Own Words

As Ann worked through each paper, she wrote the answers and insights she wanted to retain in Goodnotes on her iPad. She organized the notes by paper within each project folder and rewrote each explanation in her own words rather than copying it verbatim.

> ANN'S WORKFLOW · 5 OF 7
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> "Whatever you learn, write it down somewhere, even in short points, so you can come back to it. … Writing it in my own words made it stick. The terms felt familiar when I came back to them."
>
> — Ann

Writing in her own words made the notes faster to reread and easier to recall when she needed them, whether she was revisiting a paper weeks later or preparing to explain it to her adviser.

6. Reuse the Same Thread When New Questions Surface

When a follow-up question occurred to her later, Ann returned to the original thread instead of starting fresh. This allowed the context from her earlier questions and answers to carry into the new conversation.

> ANN'S WORKFLOW · 6 OF 7
>
> "I'd always go back to the old thread because it already remembered our earlier conversation. If you start a new one, you're back at square one, having to explain everything again."
>
> — Ann

Returning to the original thread also allowed her questions to become more critical. An explanation that made sense during the first reading might raise a better question later: Why did the authors choose this method instead of another one? What assumption supports this conclusion? Why is the answer A rather than B?

7. Know When to Stop Expanding and Start Converging

A literature review is not about reading everything. It is about understanding how your area developed and where your own research might fit.

> ANN'S WORKFLOW · 7 OF 7
>
> "By the end of your literature review, you should be able to point to about five papers you'll always come back to. When you understand how an area progressed over the last ten years, you can figure out how your own research fits into where it's going next."
>
> — Ann

Why Starting Narrow Leads to Deeper Understanding

Starting with five to ten papers limits the amount of new terminology, methods, and competing arguments a student has to hold at once. Reading one paper at a time then creates the space to understand how that study reached its conclusions, not just what those conclusions were.

That depth is what makes meaningful comparison possible later. If you skim many papers at once, you may recognize recurring terms without understanding how the studies actually differ. By first understanding each paper on its own, you have something solid to connect: methods you can compare, assumptions you can question, and findings you can place within the history of the field.

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Ann's workflow was not about moving through papers as quickly as possible. It was about building enough understanding, paper by paper, to see the relationships among them. For any student entering an unfamiliar field, the structure is simple: begin with five to ten papers, give each paper its own thread, read it section by section, and preserve what you learn in your own words.