### Language Science Fellows

Language Science Fellows (LSF) are a community of engaged graduate students training to become innovative, adaptable leaders in language science. They come from a range of departments and disciplinary backgrounds, and have a wide range of research and career goals. But they do have some goals in common:

- to develop a research program that integrates theory and/or methods from multiple disciplines;
- to take control of their graduate training, and learn skills not offered by their home department;
- to collaborate and work as a member of a diverse team;
- to change their community (educational, scientific, social, or civic) for the better.

#### What is the NRT?

The NSF Research Traineeship (NRT) Program awarded UMD a \$3M training grant (starting in 2015) for the project "Flexibility in language processes in technology: Human and global scale." This grant funds many of our Language Science Fellows through stipends and travel/research support. To participate in the NRT program, fellows must fulfill a few additional requirements, detailed below.

#### What do Language Science Fellows do?

Students in the program design an individual research and training plan based on their personal goals. The plans generally involve a number of activities outside the student's home PhD program, including:

- courses in other departments, or co-taught by faculty from other departments;
- regular participation in cross-departmental language science events, such as <u>Language Science</u>
  <u>Day</u>, <u>Winter Storm</u>, and <u>Language Science Lunch Talks</u>;
- interdisciplinary research experiences, such as a lab rotation, collaborations with students or faculty from other departments, or joining a multidisciplinary research team;
- workshops and mentoring related to career development, communication, and professional skills;
- participation in outreach to non-scientists, such as high schoolers or policy makers;
- internships in non-academic environments (e.g. industry or policy);
- leadership in student committees responsible for organizing community activities and events

Students in the NRT-funded track fulfill additional specific requirements:

- participation in a research team
- research that addresses the theme of "multi-scale data"
- a science policy experience

#### What funding is available?

All Fellows are eligible to <u>apply for funding to support research-related expenses</u> such as travel, supplies, or participant payments. Funding decisions are made on a case-by-case basis. All Fellows are also potentially eligible for some degree of stipend support. These funding decisions are made on an individual basis, depending on the availability of funds, the student's needs, and the quality of the student's research and training proposal.

## LSF Applications 2019

#### Who can apply?

Application for the Language Science Fellows Program is open to ALL currently enrolled UMD graduate students in language science, regardless of citizenship, current funding status, advisor, or home PhD program. Fellows are expected to design and follow through on an individualized training and research plan, so students are encouraged to apply in their first or second year of studies to receive full benefits from participation.

#### **Timeline**

February 25	LSF information and Q&A session (10:15-11am, HJP 2124)
March 1	Letter of intent due (by noon)
March 4-8	Meetings to discuss proposals
March 29	Proposal due (by noon)
April 19	Decision notification with brief written feedback
April 22 - May 3	Meetings to discuss feedback on proposals
June 7	Revisions due

#### Letter of intent

The letter of intent is a brief (up to one page) communication of your intention to apply. It gives us some basic information about your research and goals so that we can advise you about how to create a successful proposal. Please create a single PDF document containing the following:

- 1. Letter of intent (up to one page) explaining:
  - a. your research interests (in language suitable for a general language science audience)
  - b. your goals in applying to the LSF program
  - c. your existing funding plan for the PhD, including other fellowships you plan to apply for
- 2. CV
- 3. Academic records (unofficial transcript from Testudo is fine)

Send the PDF to Shevaun Lewis (<u>shevaun@umd.edu</u>) by noon on Friday, March 1. Upon receiving your application, Shevaun will schedule a meeting with you during the week of March 4-8 to discuss your proposal.

#### Proposal

The proposal describes an integrated research and training plan for the rest of your PhD. Please create a single PDF document containing the following:

- 1. Integrated research and training plan (up to 5 pages single spaced) explaining:
  - a. your research interests and goals
  - b. your goals for your career and the broader impacts you would like to have (on your scientific community or society)
  - c. your PLAN to develop the research and professional skills you will need to accomplish those goals, including at least the following components:
    - i. coursework within and outside your department
    - ii. workshops offered by the LSC, the Graduate School, the Career Center, or elsewhere to develop research or professional skills
    - iii. interdisciplinary research experiences, e.g. lab rotations, multidisciplinary reading groups, collaborations with students or faculty from other departments, multidisciplinary research teams (required for NRT)
    - iv. opportunities to develop and practice your communication skills, e.g. <u>Language Science Lunch Talks</u>, lab or departmental meetings, journal publications, grant writing, undergraduate teaching, speaking or writing to non-scientific audiences
    - v. opportunities to develop and practice your leadership skills, e.g. language science student committees, university student committees, event planning, leading a research team
    - vi. <u>outreach</u> to non-scientists or advocacy to policy makers (required at least once per year)
    - vii. NRT only: policy experience
- 2. Supporting documents:
  - a. A table (about one page) summarizing your timeline (by semester) for courses, research, and other training activities, indicating which activities satisfy requirements for which program (e.g. Home PhD, LSF or NRT, NACS certificate, etc.)
  - b. A non-confidential letter of commitment from your advisor(s), confirming that they endorse your research/training plan and commit to supporting your professional development.

Send the PDF to Shevaun Lewis (<a href="mailto:shevaun@umd.edu">shevaun@umd.edu</a>) by noon on Friday, March 29. In addition, have two confidential letters of recommendation sent to Shevaun by the same date. One of the letters should come from your current primary advisor. The other can come from any individual familiar with your academic abilities, whether at UMD or another institution.

#### Notification and revisions

Applications will be reviewed by a panel of LSC-affiliated faculty from several departments. Notification of program acceptance and funding decisions will be made in writing by Friday, April 19. Shevaun will schedule a meeting with you during the weeks of April 22 – May 3 to discuss feedback and potential revisions to your proposal. Revisions will be due by Friday, June 7.

# Guiding questions for the LSF research and training plan

Language Science Fellows are students who are driven to innovate in language science. They have big picture ideas that won't fit inside traditional disciplinary boundaries, and a research program that integrates theory and methods from multiple disciplines. They are not content to follow a traditional, pre-ordained training program. They are proactive about acquiring the specific skills they need to achieve their goals. They are thoughtful about their role as a scientist-in-training in their research team, department and university, and as a scientist-citizen in their society. They know that there is more to being a responsible scientist than working in the lab: they want to be a leader in changing their community for the better. They want to be an effective team member and a leader/role model/mentor for younger generations of scientists, and to reach out beyond the scientific community to ensure that their work makes a broader impact.

The purpose of the LSF application is for the applicant to think about the context of their developing research program, and to begin to take ownership of their training plan. We don't expect students to have everything figured out: we're looking for an understanding of the broader research context and community, and thoughtfulness about how they can contribute to it. We ask for an *integrated* research and training plan because it is critical for the student to understand how all of their activities are connected.

Here are some questions you should think about as you prepare to write your research and training plan.

#### What are your research interests and goals, and how do they fit into the broader context of language science?

- How would you pitch your research to someone with NO relevant background knowledge (e.g. a dean, an astrophysicist, a high school teacher, a congressperson)? Can you do it in 5 sentences or less? Can you do it on an elevator between the first floor and the fifth?
- How would you pitch your research to someone with adjacent background knowledge, but little familiarity with your particular topic (e.g. a linguist, a computer scientist, a psychologist, a speech pathologist, an audiologist, a neuroscientist)? Can you show that person how your work might contribute to their research questions? Can you demonstrate that you would be a valuable collaborator?
- Why is your research important for scientists in adjacent subfields, or to society in general?
- What compelled you to pursue these research questions as opposed to others? Why is this research program the best use of your time, experience, and skills?
- What makes you different from other researchers who have pursued similar questions? What special skills or experience do you bring to the table? How is your approach different?
- Why is interdisciplinarity critical to your research program?

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#### What kind of scientist do you want to become?

- Do you see yourself leading a lab at a university? In what kind of department? What sort of role model do you want to be for your students? What kind of impact do you hope to have on your department/university/field?
- Is teaching important to you?
- Would you rather work outside academia? What kinds of jobs are attractive to you?
- What kind of impact do you hope to have on the broader community?

#### What research skills do you need?

- What relevant research skills do you already have, and what do you need to learn to accomplish your goals?
- Which courses would be useful? How would you contribute to the class, given your area of expertise?
- Which skills will require training other than coursework? What kind of training would be helpful?
- Identify specific people on campus whose work is relevant to yours. What specifically would you gain from working with them? What specifically would they gain from working with you? (It's a good idea to actually contact these people as you're developing your plan. Conversations with them will likely be very helpful for you.)
- Does your research program require a larger team of researchers? Who would be on your dream team to answer your research questions?
- Do you prefer to work independently or as part of a team? What is your style of interaction with collaborators? What would make you a better collaborator?

#### What communication skills do you need?

- Are you a good communicator? What are your strengths and weaknesses, and how could you develop further?
- Can you communicate your research program to a variety of audiences?
- What do you find challenging about science communication? What kind of mentorship, practice, or other support would be most useful?
- Do you prefer to communicate orally or in writing? Why?
- Why do you want to communicate? What do you find motivating about communicating with other scientists or disseminating your work more broadly?
- For you personally, what is the value of reaching out to high schoolers, policy makers, the Twitterverse, etc.?
- What could you contribute to the LSC's activities related to communication and outreach? What skills and experiences do you bring to the table? What are you passionate about developing further?

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#### What teaching/mentorship skills do you need?

- Do you have experience teaching at any level? What teaching experiences are you hoping to gain?
- What teaching challenges have you encountered? What kinds of training and support would be useful? Is that support currently available? If not, what would you propose?
- Do you have experience mentoring students at any level? What is your mentorship style? What do you get out of mentoring relationships, and what do you hope your mentees get out of them?

# Why is membership in the LSC community important to you? What will you get out of it, and what will you give back?

- Which LSC activities do you find most useful?
- What can you contribute to the community? Do you have ideas about how to improve undergraduate or graduate training, or how to disseminate language science to the public?

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