

2011 SGP Travelling Scholars Award Program Report

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1. The focus of the visit (i.e., reasons for inviting the selected speaker) and specific benefits of the program to the department.

Focus of the visit: We invited Dr. Cahalan as one of the world leading experts on ion channel research. His contributions are crucial for the understanding of the functional repertoire of ion channel function in lymphocytes, especially Ca^{2+} release-activated Ca^{2+} channels and voltage-gated potassium channels. Mike has been a trailblazer who has characterized the dynamic interactions between T cells and antigen-presenting cells through innovative applications of fluorescent labeling methods, new experimental preparations, and the use of 2-photon microscopy and total internal reflection microscopy. Mike's research has created exciting opportunities for the study of lymphocyte motility, chemotaxis, and antigen recognition in the physiological context of the tissue environment. In addition, he has an excellent and inspiring track record on mentoring young scientists who later have moved on to build successful careers as independent researchers. Adding to his scientific excellence, his personal qualities made him an ideal individual for the SGP Traveling Scholar Program. He is well known for his keen interest in interacting with young scientists and his ability to encourage them to continue pursuing the best possible research. During his visit at Northwestern University and the University of Chicago, Dr. Cahalan interacted broadly with the students, postdocs and faculty at both institutions and gave a series of formal and informal seminars on different aspects of his research and scientific career.

Specific Benefits of the Program to the Department: Dr. Cahalan's visit to Chicago was hosted under the joint aegis of the University of Chicago and Northwestern University. Mike is a dynamic speaker and gave two different, outstanding formal seminars that were attended not only by specialists in the field but also non-specialists, and in particular graduate students and postdoctoral trainees of the two institutions. A particular feature of his visit was that it offered an opportunity to bring together investigators from two major universities in Chicago, and provided a forum to develop further scientific contacts between the two schools. Thanks to the SGP-TSAP we have had the unique opportunity to bring to our students and young scientists a world-

renowned researcher. Apart from the students of the various PhD programs from both institutions, Dr. Cahalan had a meeting with young investigators in the Pharmacology Department at Northwestern University. We sincerely believe that this combination has made the most out of the SGP Traveling Scholar Award!

2. The audience.

A. Northwestern University:

1. *Meetings with PhD students and postdocs:* 10 students and postdocs over an informal lunch at Northwestern University.

2. *Formal Lecture (coordinated with the Integrated Graduate Program):* There were approximately 200 people in the audience including about 100 trainees (from the IGP and NUIN graduate programs at Northwestern), postdocs and young investigators, 70 senior investigators.

B. University of Chicago:

1. *Meetings with PhD students:* This occurred at the chalk talk following the formal lecture with 21 students from the graduate programs in the *Committees of Cell Physiology, Immunology and Physiology and the Medical Science Training Program (MSTP).*

2. *Formal Lecture (coordinated with the Committees of Cell Physiology, Immunology and Physiology, the MSTP and the Dept of Biochemistry and Molecular Biology):* There were approximately 85 people in the audience including about 25 students (from the IGP and NUIN graduate programs at Northwestern), 20 postdocs and young investigators, and 40 junior and senior faculty members.

3. The title of the formal seminars

A. Northwestern University: "Cellular and Molecular Choreography of lymphocyte activation"

B. University of Chicago: "Cracking CRAC, the calcium release-activated calcium channel in the immune system"

4. Chalk-talk: Dr. Cahalan talked with students from the Committees of *Committees of Cell Physiology, Immunology and Physiology, the MSTP* immediately following his formal lecture and answered questions about his research and career.

5. Meetings with scientists.

A. Northwestern University: Dr. Cahalan had one-on-one meetings with several faculty members including Drs. Murali Prakriya (junior, SGP member),

Adrian Gross (junior), Toshio Narahashi (senior, SGP member), Eugene Silinsky (senior), Stephen Miller (senior), and Richard Miller (senior).

B. University of Chicago: Dr. Cahalan had one-on-one meetings with Drs. William Green (senior, SGP member), Francisco Bezanilla (senior), Erin Adams (junior), Dorothy Hanck (senior, SGP member), Eric Beyer (senior), Deborah Nelson (senior, SGP member), Steven Goldstein (senior, SGP member) and Ana Correa (junior).

6. Social activities (receptions.)

April 4 2011:

1. Following his signature seminar, the Integrated Graduate Program co-hosted a reception to facilitate interaction of students, postdocs and junior faculty with Dr. Cahalan. This was attended by over 100 people and provided an excellent opportunity for the students of the IGP PhD program to speak with Dr. Cahalan in a social setting. Dr. Cahalan had several discussions with students at this reception. The reception was also attended by students and faculty from the University of Chicago.
2. Dinner with junior and senior faculty.

April 5 2011:

1. Dr. Cahalan attended lunch at the faculty club with 3 faculty members both junior and senior.
2. Dr. Cahalan helped host a reception before the seminar attended by students, postdocs and faculty.
3. Dinner with junior and senior faculty.

SUMMARY

Michael Cahalan visited the Northwestern University and to the University of Chicago over a two day period April 4 – 5, 20011 and gave a series of formal and informal lectures and talks to students, postdoctoral fellows and professors at the two institutions. Dr. Cahalan gave a special seminar at Northwestern University as part of the “Lectures in the Life Sciences (LLS) series”. This series hosts preeminent speakers from around the world whose work has broad appeal to the diverse research community, drew attendees from both the Chicago and Evanston campuses of Northwestern University. Dr. Cahalan also gave a special seminar in one of the main halls at the University of Chicago, in the Basic Science Learning Center that drew a very broad audience. Dr. Cahalan met with a large number of junior and senior professors while at both campuses. The seminars and talks were interspersed with a variety of social functions that allowed Dr. Cahalan to informally meet and interact with all of the participants.