

**OPERATIONS MANUAL
BACTERIAL LOCOMOTION AND
SIGNAL TRANSDUCTION (BLAST)
MEETINGS**



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INTRODUCTION

Purpose Of BLAST

The Bacterial Locomotion and Signal Transduction (BLAST) meetings were created to provide a way for the bacterial locomotion and signal transduction community to meet in alternate years when the biennial Gordon Research Conference on Sensory Transduction In Microorganisms is not held. Furthermore, the BLAST meetings are designed to:

- Minimize meeting and travel costs to the greatest extent possible consistent with a high quality meeting, in order to maximize the opportunity for young scientists to attend. Traditionally, one aspect of this strategy has been to choose all talks from submitted abstracts (i.e. no invited speakers subsidized by other attendees).
- Avoid an attendance cap to allow wide participation.
- Provide preference for graduate students, postdoctoral scholars, and early career investigators when choosing oral presentations for the meeting program.
- Provide a meeting focused exclusively on prokaryotic microorganisms.

Need For A Self-Perpetuating Organization

BLAST was founded in ~1990 by Phil Matsumura, Joe Falke, Mike Manson, and Sandy Parkinson. For more information on BLAST history, see Hazelbauer, G.L. *Annu. Rev. Microbiol.* **66**, 285 (2012). The informal governance structure utilized by the Founding Directors served BLAST well for more than two decades. However, the retirement of the Founding Chair in 2011 highlighted the need to create a self-perpetuating structure for BLAST that will preserve institutional memory and provide continuity in operations across the inevitable turnover of critical personnel.

BLAST Operations Manual

This operations manual contains three elements of a self-perpetuation strategy for BLAST:

First, the manual itself is intended to act as a repository of the practical information necessary to organize a successful BLAST meeting. The manual should be a dynamic document that, at a minimum, is updated after every meeting. Whenever someone assumes a job of any sort in the BLAST organization, they should be able to consult the manual to understand the scope of their responsibilities and obtain guidance on how to complete their assigned tasks.

Second, BLAST has a long and successful history of involving a wide cross section of meeting attendees in implementing the scientific aspects of the program, including acting as meeting Chair and Vice Chair, writing a review of the meeting for publication, choosing award recipients, and acting as session chairs. All of these duties are assigned to new people for each meeting. In contrast, the Board of Directors, who makes choices about the overall direction and future plans of BLAST, did not change for more than 20 years. Beginning with BLAST XII, a new mechanism for choosing the Board of Directors was established that (i) combines continuity with the regular infusion

of new members and (ii) more directly involves our scientific community in choices about the future of BLAST through their selection of board members.

Third, to help meet the changing needs of our field, we seek input about all aspects of BLAST from the scientific community through two meetings held at BLAST conferences, beginning with BLAST XII. The first is a "town hall" meeting open only to graduate students and postdoctoral scientists, the primary intended participants in BLAST. The second gathering is a business meeting open to all BLAST attendees. Agendas for both meetings are included in a business document distributed to all attendees.

BLAST Website

A great deal of information about the BLAST organization, previous BLAST meetings, published meeting reviews, and the BLAST scientific community may be found at the BLAST website, <http://blast.ucsc.edu>.

Maximizing Participation by the BLAST Scientific Community

As a general guiding principle, BLAST seeks to involve as broad a sample of the bacterial locomotion and signal transduction scientific community as possible in all aspects of BLAST governance and meetings. Therefore, two people affiliated with the same institution may not serve on the same committee (Board of Directors, Program Committee, Review Committee, Awards Committee, etc.). Similarly, spouses or significant others may not serve on the same committee

CHAIR OF THE BOARD OF DIRECTORS

Selection

The Board of Directors appoints a new Chair following the resignation or removal of the previous Chair. A newly appointed Chair serves in a temporary capacity until ratified at the business meeting of subsequent BLAST conference. The longest serving member of the Board of Directors leads the ratification proceedings. During the ratification, the temporary Chair and members of his or her lab leave the room. The ratification vote is by a show of hands in which all meeting attendees may participate.

Vote Of No Confidence

Maintenance of part-time administrative support for BLAST in a cost effective manner may be best accomplished by affiliation with an established academic organization. This arrangement in turn may put practical constraints on who can serve as Chair of the Board of Directors. Therefore, the Chair is not subject to the same term limits as the other members of the Board of Directors. Nevertheless, the Chair serves at the discretion of the Board of Directors. The Chair is subject to a vote of no confidence that may be called at any time by any member of the Board of Directors. If half or more of the Board members vote against the Chair, then the Chair will step down.

Responsibilities

The responsibilities of the Chair of the BLAST Board of Directors include, but are not limited to:

- Consult with the Board of Directors about significant matters pertaining to BLAST, endeavor to achieve consensus, but ultimately make necessary decisions.
- Secure and maintain all necessary administrative support for BLAST. These functions include, but are not limited to: accounting (including an annual audit), compliance with tax regulations, access to liability insurance, legal advice as needed, and logistical support for BLAST meetings. The Molecular Biology Consortium currently provides these functions, with partial compensation by BLAST.
- Approve the contract negotiated with the venue for the BLAST meeting.
- Consult with the administrative staff to ensure that the logistical matters necessary for a successful meeting are implemented.
- Choose the meeting Vice Chair, and then advise the meeting Chair and Vice Chair in fulfilling their responsibilities.
- Lead a post-conference discussion with the Board of Directors and administrative staff to evaluate all aspects of the meeting and generate ideas for improvement of future BLAST meetings. Ensure that the BLAST operations manual is revised following each meeting to capture the latest best practices.

The Chair is ultimately responsible for ensuring the continuing survival of BLAST as an organization and therefore must take the lead in dealing with other matters as they arise.

BOARD OF DIRECTORS

Composition and Terms of Office

In addition to the Chair (described in the previous section), the BLAST Board of Directors is composed of four members. A Board of Directors that is collectively representative of the BLAST community by being diverse with respect to scientific field, country, gender, age, etc. is desirable. To ensure institutional memory and continuity of leadership, the four Directors serve staggered terms spanning four BLAST meetings (currently eight years), so one new Director is elected at each meeting. Terms begin at the close of the BLAST meeting at which a Director is elected. Terms end at the close of the BLAST meeting specified at the time of election.

To set up the rotation, two new Directors were elected at BLAST XII, with the top two vote recipients being assigned to terms spanning four or three BLAST meetings (currently eight or six years) in accordance with their vote totals. Two Founding Directors served four-year and two-year terms to provide continuity during transition to the new system and then stepped down.

Eligibility

To be eligible for election to the BLAST Board of Directors:

- Nominees must be senior scientists. Graduate students, postdoctoral scholars, and technicians are not eligible.
- Nominees must attend the BLAST meeting at which they run for election.
- Nominees must have attended at least two of the five BLAST meetings prior to the meeting at which they run for election.

Elections

Any BLAST meeting attendee may nominate an eligible attendee other than himself or herself for membership on the Board of Directors. Nominations are submitted to the administrative staff at the BLAST meeting. Members of the current Board of Directors in attendance at the meeting will verify that nominees are willing to serve if elected. All willing nominees will be on the ballot. All meeting attendees may vote. Voting is by secret ballot at the business meeting. The ballot will include an abstention option: "I am not sufficiently familiar with the nominees and therefore prefer not to vote." The administrative staff counts the votes. In the event of a tie, a runoff election is held.

Vacancy

If a member of the BLAST Board of Directors resigns or otherwise does not complete their term of office, the remaining members of the Board and the Chair appoint a mutually agreeable individual to fill the vacancy until the next BLAST meeting. At the next BLAST meeting following a vacancy, the BLAST community will elect a new member of the Board of Directors to complete the term of office.

Responsibilities

The responsibilities of the BLAST Board of Directors are to:

- Provide advice (either solicited or unsolicited) to the Chair of the Board of Directors on important aspects of BLAST operations, including but not limited to: location, format, and topics of future BLAST meetings; selection of meeting Chair, Vice Chair, and Program Committee; the governance and administrative structure of BLAST; and the content of the BLAST operations manual.
- Set guidelines for use of BLAST funds.
- Choose recipients of travel awards.
- Chose the Chair of the Board of Directors. The Directors' choice of a Chair is subject to ratification by the BLAST community at the next BLAST meeting. The Chair serves at the discretion of the Board and can be removed at any time by a vote of no confidence in which at least half of the members of the Board of Directors vote against the Chair. If the Chair fails to comply with a vote of no confidence, then the Board may publicize their opinion to the BLAST community.

BUSINESS MEETINGS

Town Hall Meeting

A primary purpose of BLAST is to provide a forum for scientists at an early stage of their careers to present and discuss their research results, but those same scientists are not directly represented on the BLAST Board of Directors. Therefore, a "town hall" meeting for graduate students and postdoctoral scholars is held at each BLAST meeting to engage in discussion with the BLAST Board of Directors, administrative staff, and Meeting Vice-Chair (in his/her role as Chair of the next Meeting). The meeting is an opportunity for students and postdoctoral scientists to provide feedback about BLAST meetings, ask questions, make suggestions, etc. The meeting is closed to senior scientists other than the BLAST Board of Directors. The time and location of the town hall meeting are published with the rest of the meeting program schedule.

Business Meeting

A business meeting is held at each BLAST meeting for the purposes of:

- Ratification of a new Chair of the Board of Directors, if necessary. The ratification procedure is described in the section on the Chair of the Board of Directors.
- Providing an opportunity for the Chair of the Board of Directors and/or members of the Board of Directors to bring any matters that they desire to the attention of the BLAST community.
- Providing an opportunity for meeting attendees to ask questions of the BLAST leadership team or make suggestions about BLAST operations.
- Elect new member(s) to the BLAST Board of Directors. The election procedure is described in the section on the Board of Directors.

The business meeting is open to all BLAST meeting attendees. The time and location of the business meeting are published with the rest of the meeting program schedule.

BLAST Business Documents

A document describing BLAST business matters, separate from the program book, is distributed to all BLAST attendees upon arrival at the conference. At a minimum, the business document includes a list of potential nominees for the Board of Directors, a description of the nomination and election process, and agendas for the town hall and business meetings.

ADMINISTRATIVE STAFF

BLAST has been fortunate to have continuity of administrative staff for our entire existence. Their accumulated practical experience makes a significant contribution to the success of the BLAST meetings, as well as minimizes costs. A partial list of functions includes;

Point of Contact

- Serve as point of contact between BLAST organization and the scientific community.
- Respond to inquiries from the community either directly or by forwarding to appropriate person within the BLAST organization for an answer.
- Respond to requests for information from the BLAST organization.
- Maintain BLAST email listserv for purposes of advertising meetings, job openings, and other items of interest to the BLAST community.
- Maintain BLAST website (currently done by Karen Ottemann).
- Maintain BLAST Facebook page (www.facebook.com/groups/blastxii)
- Potential future responsibility for other social media activities to facilitate communication both between the BLAST organization and the scientific community and within the BLAST scientific community.

Financial

- Prepare a budget in advance of each BLAST meeting to determine registration fees. Review budget after all registrations are received. Regularly monitor budget and reconcile expenditures to avoid overspending.
- Collect and disburse BLAST funds.
- Inform the Chair of the Board of Directors of donations, so they may be suitably acknowledged
- Safely maintain BLAST funds in between meetings.
- Provide standard accounting of all funds, including annual audit.
- Prepare financial summary for Board of Directors following each meeting.
- Ensure compliance with Internal Revenue Service rules.
- Support preparation of grant proposals seeking funding to support BLAST meetings.

Legal

- Maintain records of legal documents (e.g. contracts).
- Obtain legal advice as needed.

Insurance

- Maintain liability insurance as appropriate.

Meeting Venue

- Upon direction of the Chair of the Board of Directors, prepare Request for Proposals and solicit bids from potential venues. This is typically done by sending the RFP to the Convention & Visitors Bureaus in cities of interest.
- Following venue decision by the BLAST Board of Directors, negotiate contract.

Meeting Logistics

- Advertise the meeting. At a minimum, this is done via the BLAST listserv, but other approaches to reach potential new attendees are also pursued, such as contacting microbiologists in the host city.
- Set up registration website, currently done at www.regonline.com. The registration system needs to be able to collect contact information for the participant list in the program book, photographs of attendees, talk/poster abstracts, room and meal preferences, optional tour choices, and payment information.
- Arrange system to collect meeting registration fees, including from foreign sources. This is currently done by credit card, at a cost of 6%.
- Provide Program Committee with abstract submissions. Communicate with attendees regarding selection of talks and posters, including relevant details of presentations.
- Prepare program book, which includes meeting organizers, award information, meeting schedule, talk abstracts, poster abstracts, attendee contact information and photos, etc.
- Publish and distribute business document, including potential nominees for the Board of Directors and agendas for the town hall and business meetings.
- Arrange for and distribute souvenirs (T-shirts, flash drives, etc.)
- Arrange for audio-visual system
- Arrange for transport of meeting supplies to and from venue
- If appropriate, arrange for ground transportation from airport to meeting venue
- Arrange for optional Wednesday afternoon/evening activities
- Secure poster and talk award plaques
- Interface with venue about room assignments, meal needs, etc.
- Provide a list of senior scientists attending the meeting who would be suitable for service on the Poster Awards Committee (i.e. do not have graduate students or postdoctoral scientists making poster presentations at the meeting).
- Provide a list of meeting attendees eligible for nomination to the BLAST Board of Directors. Collect nominations for Board of Director candidates from meeting attendees. Prepare and count written ballots.

Improvements

- The administrative staff is in a unique position to have a coherent overall view of the BLAST meeting and operations. As the opportunity arises, the staff makes suggestions to the Chair and/or Board of Directors about possible ways to improve BLAST.
- Historically, the meeting administration has set a goal of introducing one new feature at each BLAST meeting.

Compensation

- BLAST pays the organization that employs administrative staff to compensate for time spent on BLAST activities. Cost is currently \$83 per meeting attendee.
- BLAST pays travel costs for administrative staff to attend meeting. Cost is currently \$15 per meeting attendee.

MEETING CHAIR & VICE CHAIR

Selection

The Chair of the BLAST Board of Directors chooses the Meeting Vice Chair in consultation with the Board of Directors. The Meeting Vice Chair becomes Chair of the subsequent BLAST meeting, subject to mutual agreement with the Chair of the BLAST Board of Directors.

Duties of Meeting Chair

The duties of the Meeting Chair prior to the BLAST meeting are:

- With the assistance of the Meeting Vice Chair, nominate the chair and members of the of Meeting Review committee. Following approval of the Chair of the BLAST Board of Directors, invite proposed members to serve on the committee. Secure the commitment of the Meeting Review committee chair and their approval of proposed committee members before inviting the remainder of the committee.
- Lead the design of the meeting logo, in conjunction with Meeting Vice Chair and any other BLAST officials who may care to participate.
- Serve on the Program Committee
- With the assistance of the Meeting Vice Chair, nominate the chair and members of the Poster Awards committee. Following approval of the Chair of BLAST Board of Directors, invite proposed members to serve on committee. Secure the commitment of the Poster Award committee chair and their approval of proposed committee members before inviting the remainder of the committee.

The duties of the Meeting Chair at the BLAST meeting are:

- Make opening and closing remarks at the meeting, and announcements as appropriate.
- In conjunction with the Meeting Vice-Chair, choose the recipients of the BLAST Board of Directors Award for best talk by a student and the BLAST Founders Award for best talk by a postdoctoral scholar. Announce and present awards.

Duties of Meeting Vice Chair

The duties of the Meeting Vice Chair prior to the BLAST meeting are:

- Assist the Meeting Chair in selection of the Meeting Review committee.
- Assist the Meeting Chair in design of the meeting logo.
- Serve on the Program Committee.
- Assist the Meeting Chair in selection of the Poster Awards committee.

The duties of the Meeting Vice Chair at the BLAST meeting are:

- Set up, run, and take down the projector and associated equipment (pointer, slide changer) at each session of talks.
- In conjunction with the Meeting Chair, choose the recipient of the BLAST Board of Directors Award for best talk by a student and the BLAST Founders Award for best talk by a postdoctoral scholar.

The duties of the Meeting Vice Chair after the BLAST meeting are:

- Serve as Meeting Chair for next BLAST meeting, subject to mutual agreement with the Chair of the BLAST Board of Directors.
- If desired, safeguard audiovisual equipment (projector, switch box, cables, laser pointer, remote control) until the next BLAST meeting. One month prior to the meeting, test equipment to be sure it is functioning properly.

PROGRAM COMMITTEE

Program Committee Composition and Selection

The Program Committee is composed three people: a semi-permanent Chairperson, to preserve institutional memory, and the Meeting Chair and Vice Chair, to involve the Meeting Chair and Vice Chair in meeting planning in a meaningful way. The BLAST Board of Directors chooses the Chair of the Program Committee.

Responsibility of Program Committee

The Program Committee takes all the abstracts submitted by meeting attendees, chooses which will be presented as talks (and thus which will be presented as posters), and assembles the talks into a program. In making these decisions, the Program Committee keeps in mind the BLAST mandate to provide opportunities for graduate students, postdoctoral scientists, and early career investigators to speak. It has generally been considered desirable to choose speakers in such a way as to represent as many different laboratories as possible. Priority is also given to people who have not talked at recent BLAST meetings.

In recent years, talks at BLAST meetings have been grouped into four three-hour long morning sessions of eight speakers and three two and a half-hour long afternoon or evening sessions of six speakers. Talks are budgeted at 15 minutes apiece, with five minutes for questions. This schedule accommodates up to 50 speakers, a significant fraction of the ~150 attendees at a typical BLAST meeting.

Once the program is assembled, the Program Committee suggests Session Chairs. Following approval of the Chair of the BLAST Board of Directors, the Program Committee invites the Session Chairs to serve.

Encouraging Effective Talks

The BLAST audience presents some challenges to effective communication. In particular, the audience is international (for many, English is not the first language), scientifically diverse, and includes a large fraction of young scientists. The BLAST meeting utilizes multiple tactics to increase the chance that the talks are understandable to as many attendees as possible:

- The abstracts are structured, allowed a full page of space, and must include a figure.
- The program book containing all abstracts is posted online prior to the meeting, to allow attendees time to familiarize themselves with the material.
- Speakers are provided with written advice (Appendix 11) on how to provide an effective talk for the BLAST audience.
- The Session Chairs provide a brief introduction to the key points concerning the topic for each session.

Poster Display Strategy

To maximize the opportunity for scientific communication, poster presentations at BLAST meetings are guided by the following principles:

- There is no limit on the number of posters from any one laboratory.
- All reasonable efforts are made to accommodate posters that arrive at the meeting without prior abstract submission. However, such posters are not eligible for awards
- Posters remain on display for the entire duration of the meeting and ideally are available for viewing at all times.
- For convenience, posters are physically grouped by laboratory.
- An opening night Poster Sneak Preview session allows attendees who are not jet-lagged the chance to informally view posters and interact with other attendees.
- Participants are expected to be at their posters during designated times. Posters are assigned to one of four groups (A, B, C, D), with two groups assigned to present in each of four 1¼-hour long poster sessions. Using four groups allows poster presenters access to 75% of poster presentations (all except their own group).
- The availability of white boards near the posters may facilitate scientific conversations.

SESSION CHAIRS

Selection

After the program is finalized, the Program Committee chooses the Session Chairs. Session Chairs should ideally have scientific expertise relevant to the focus of the session. Preference should be given to people not serving in other leadership or committee roles at the meeting and to younger investigators. A group of Session Chairs that is collectively representative of the attendee pool by being diverse with respect to scientific field, country, gender, age, etc. is desirable.

Duties

The duties of the Session Chairs are to:

- Arrange the talks within their session into a logical order and inform the BLAST administration of the order by INSERT DATE. The order should be devised in conjunction with preparation of introductory remarks (see next bullet point).
- Provide a *brief* introduction (no more than five minutes) to the topic of the session. The introduction should focus on "Big Picture" issues such as the general background of the systems studied and identify the current important questions in the field. The introduction should NOT convey the take-home message of the talks in the session.
- Assist speakers with microphone, pointer, remote control, etc.
- Keep speakers on time.
- Recruit two people to serve as microphone "runners" during the question and answer period following each talk.
- Facilitate question and answer session after each talk. Ensure that graduate students and postdoctoral scholars have the opportunity to ask questions (e.g. by specifically calling on students or postdocs before taking questions from faculty). Be prepared with their own questions if the audience has none.

MEETING REVIEW COMMITTEE

Meeting Review Committee Composition and Selection

The Meeting Review Committee is composed of a Chairperson and two or three other members. The Meeting Review Committee is typically chosen at least eight months prior to the BLAST meeting. The Meeting Chair and Vice Chair propose potential committee members, who are approved by the Chair of the Board of Directors before being invited by the Meeting Chair to serve. Ideally, members will be regular BLAST attendees but not have previously served on the Meeting Review Committee. A committee that is representative of the attendee pool by being diverse with respect to scientific field, country, gender, age, etc. is desirable.

Meeting Review Committee Operations

The Meeting Review Committee is chosen far in advance of the BLAST meeting (before meeting registration opens) to ensure appropriate travel arrangements for committee members and allow time to secure an agreement with a professional journal to publish the meeting review.

The methods used to divide the work and assemble the review are up to the discretion of the committee. After the meeting program is finalized, the Meeting Review Committee is given early access to the program and all abstracts to organize and prepare before the BLAST meeting begins.

BLAST pays for the Meeting Review Committee to stay one additional day at the venue after the meeting ends for the purpose of beginning to prepare the review while the meeting is still fresh in everyone's minds and to make plans for completion of the review.

The Meeting Review Committee endeavors to complete their review and submit it for publication in a timely manner, ideally within a few months of the meeting. The goal is to publish the meeting review in the same calendar year that the meeting was held.

AWARDS & AWARDS COMMITTEES

Poster Awards History

The **Robert M. Macnab Award** was initiated at BLAST VIII (2005) with a generous donation from Mrs. May Macnab. **The Robert J. Kadner Award** was initiated at BLAST IX (2007) using BLAST funds. Both awards are intended to remember active members of the BLAST community who shared with a passion for the education of young scientists. Appropriately, the awards recognize outstanding poster presentations by young investigators. With two awards available at BLAST IX, the Kadner Award was designated for the best poster by a graduate student and the Macnab Award was designated for the best poster by a postdoctoral scientist.

The Nucleic Acids Research Award was initiated at BLAST XI with a donation from publisher Oxford University Press. The award is given for the best poster presentation by a young investigator whose research is in the area of regulation of transcription.

The Microbiology Award was initiated at BLAST XIV with a donation from the Microbiology Society. The award is given for the second best poster presentation by a graduate student

The Macnab, Kadner, and *Nucleic Acids Research* poster awards each consist of a plaque and a cash prize. The *Microbiology* poster award consists of a certificate, a cash prize, and a one-year membership in the Microbiology Society. Recipients are typically highlighted in the meeting review article.

Poster Awards Committee Selection

The Poster Awards Committee is typically chosen after the program has been assembled. This allows the list of senior scientists attending the meeting to be screened for individuals who ideally (i) have not previously served on the committee, (ii) are not serving in other roles at the meeting, (iii) are regular BLAST attendees, and (iv) do not have students or postdoctoral scholars presenting posters at the meeting. A committee that is representative of the attendee pool by being diverse with respect to scientific field, country, gender, age, etc. is desirable.

Poster Awards Eligibility

Although BLAST seeks to maximize participation by allowing whenever possible posters to be displayed at the meeting even if abstracts were not submitted in advance, abstracts must be submitted on time in order for a poster to be eligible for awards. This requirement is because the Poster Awards Committee makes judging plans prior to the meeting and late submissions could disrupt plans or result in unfair situations.

Poster Awards Selection

The method of choosing poster award recipients is up to the discretion of the committee. A typical strategy has been some form of initial review by subsets of the committee to narrow down the list, followed by consideration of the finalists by the entire

committee. Winners are typically chosen in time to have awards engraved prior to the awards ceremony.

The Poster Award Committee decides which posters presented by graduate students or postdoctoral scientists meet the topic criteria specified by *Nucleic Acids Research*, i.e. regulation of transcription.

Speaker Awards History

The **BLAST Board of Directors Award** for the best talk was initiated at BLAST XI (2011) with a generous donation from Founding Chair Phil Matsumura. Starting with BLAST XIII (2015), funding responsibility was assumed by the BLAST organization, and a second speaking award was created. The **BLAST Founders Award** recognizes the people (Phil Matsumura, Joe Falke, Mike Manson, Sandy Parkinson) who founded BLAST. With two awards available, the Board of Directors Award was designated for the best talk by a graduate student and the Founders Award was designated for the best talk by a postdoctoral scholar.

Speaker Awards Selection

The Speaker Awards Committee is composed of the Meeting Chair and Vice Chair. The method of choosing the talk award recipient is up to the discretion of the committee. One strategy is to compile a list of finalists by choosing the best talk immediately after each session and then choosing the winner from among the finalists.

Travel Award History

The **Robert M. Macnab Memorial Travel Awards** were established at BLAST XII (2013) to recognize 10th anniversary of Dr. Macnab's death. The awards are funded by a substantial donation from Mrs. May Macnab.

Travel Award Selection

The BLAST Board of Directors chooses travel award recipients based on the following criteria:

- Recipients should be young scientists, i.e. graduate students or young postdoctoral scientists (donor specification).
- Preference is given to young scientists from developing countries who might not otherwise be able to attend (donor preference).
- Scientific potential is also considered as a means to rank candidates (donor specification).
- To focus resources where they are most needed, awardees should be based outside of the country that hosts the BLAST meeting.
- No more than one person per laboratory may receive a travel award for a particular BLAST meeting.
- Past awardees are ineligible to receive future travel awards.

The number and magnitude of travel awards made is at the discretion of the BLAST Board of Directors, consistent with their responsibility to prudently manage BLAST resources. The preferred component of a travel award is to waive part or all of the

double occupancy registration fee. Reimbursement up to a specified amount of travel expenses may also be made with satisfactory documentation. BLAST is not in a position to assess need in detail, so the amount of the award is the same for all recipients.

Recipients of travel awards incur an obligation to contribute to the BLAST meeting by (i) presenting either a talk or a poster and (ii) attending the entire meeting. Travel awardees are eligible for talk and poster awards.

AUDIO/VISUAL EQUIPMENT

Cost Saving Strategy

To avoid the substantial costs of renting audio/visual equipment for each meeting, BLAST owns the appropriate equipment. The equipment quickly pays for itself, even when taking into account the need to occasionally purchase new equipment. In addition, BLAST will consider renting its equipment to other organizations as a way to generate income.

Sound System Operation

The BLAST sound system consists of a mixing board, four wireless microphones with base stations, and assorted cables, power supplies, and extension cords. Operating instructions are as follows:

Power requirements:

- The four microphone base stations and the mixing board each have their own power cord/transformer. Therefore, a power strip with at least five outlets is needed.
- The three handheld microphones and the clip on microphone each use two AA batteries, which last ~8 hours. Take batteries out after each use and put in fresh batteries each day to be safe.

Connections:

- *To house sound system* - Switch on side of DI box should be set to GND. Connect output of DI box to XLR cable and then to house system
- *To mixing board* - Use ¼" cable to connect L channel of mixing board output to input of DI box. Connect each of base stations #1, #2, and #4 to numbered mixing board inputs using ¼" cables. Connect base station #3 (for clip-on microphone, which is more sensitive than the hand-held microphones) to the mixing board using a four-foot XLR cable.

Microphones:

- *Channels* - The four microphone base stations should all have different channels, but with the same first digit. Push button on left front to choose a first digit. Push again to allow station to find an open channel.
- *Synchronization* - The microphones must be linked to their base stations. Open cover of battery compartment to reveal IR sensor. Turn on microphone power. Hold sensor in front of IR beam on right front of base station. Push and hold button on right front of base station. Microphone power light will go out. When light comes back on solid green, synchronization is complete.
- *Test* - Test microphones by blowing on them. Do not tap. In addition to hearing sound from speakers, green light on left front of base station will light up when microphone picks up sound.
- *Tape* - Put tape over on/off buttons on hand held microphones to discourage people from turning them on and off. It is better to leave microphones on all the time and control sound from the mixing board.

- *Numbers* - It is helpful to designate specific microphone numbers for specific tasks. Hand held #1 is for the Session Chair. Hand held #2 is for the speaker or questions. Pocket #3 is for the speaker. Hand held #4 is for questions.
- *Pocket transmitter* - The pocket transmitter can be used with either a clip on or headset microphone. The headset has the advantage of maintaining a constant position with respect to the speaker's mouth. The clip on microphone should be positioned on the side of the speaker closest to the screen, to avoid sound loss when speaker turns head toward screen.

Mixing board settings:

- *Main volume* (lower right corner) - set near low end (~25) to have maximal control from other knobs.
- *Push buttons* - all should be up (off).
- *Pan* - Set the same (L or R) as the jack used for output cable.
- *FX* - This is for reverb, etc. Do not use. All knobs should be turned off.
- *Equalizer* - Use to emphasize natural qualities of speaker's voice. As a general rule, for female speakers, turn Hi up (2 o'clock), and Mid and Low down (10 o'clock). Similarly, for male speakers, turn Hi down, and Mid and Low up.
- *Gain* - Put near the middle (12 o'clock) for hand held microphones and turn down some (9-10 o'clock) for clip-on microphone.
- *Level* - These are the main controls to use. Turn off microphones that are not in use. Knowing which microphones are assigned to which task is helpful. If confused, operator can look at base stations to figure out which volume control to adjust - the light on front left is green when in use.

Projector Operation

The BLAST projection system consists of a digital projector, switch box, cables, remote control, laser pointer, and timer. The switch box greatly facilitates rapid transitions between speakers. Operating instructions are as follows:

Projector:

- The projector is bright enough that most images can be seen with room lights on.
- Projector can be adjusted so that image on large screen is rectangular rather than trapezoidal.

Switch box:

- Connect cable from switch box output to projector input.
- Connect cables from inputs #1-4 to up to four different computers. Hook up first four computers before session and remainder during coffee break.

Computers:

- Due to compatibility issues between different computers, it is best to use the speaker's computer.
- If presentation file is on a flash drive, transfer to hard drive of computer to speed up file access.
- Plug in computers (don't rely on battery power)
- Turn off sleep/screen saver functions

Remote control

- USB stick allows remote control changing of slides. Test in each computer prior to session.

APPENDICES

Appendix 1. BLAST Meeting Venues, Attendance, & Costs

BLAST Meeting	Dates	Location	Attendance		Cost Per Person ^b	
			Full	Local ^a	Double	Single
I	Jan. 17-20, 1991	Austin, TX	128	NA	?	?
II	Jan. 14-18, 1993	Austin, TX	180?	NA	?	?
III	Jan. 12-16, 1995	Austin, TX	159	NA	\$450	\$650
IV	Jan. 9-13, 1997	Cuernavaca, MX	175 combined		\$500	\$700
V	Jan. 16-21, 1999	Cuernavaca, MX	181	19	\$600	\$900
VI	Jan. 14-19, 2001	Cuernavaca, MX	166	22	\$785	\$1,170
VII	Jan. 19-24, 2003	Cuernavaca, MX	169	24	\$850	\$1,235
VIII	Jan. 16-21, 2005	Boca Raton, FL	204	NA	\$760	\$1,009
IX	Jan. 14-19, 2007	Laughlin, NV	187	NA	\$575	\$630
X	Jan. 18-23, 2009	Cuernavaca, MX	149	27	\$1,150	\$1,595
XI	Jan. 16-21, 2011	New Orleans, LA	158	NA	\$1,195	\$1,580
XII	Jan. 20-25, 2013	Tucson, AZ	148	NA	\$915	\$1,200
XIII	Jan. 18-23, 2015	Tucson, AZ	133	0	\$945	\$1,235
XIV	Jan. 15-20, 2017	New Orleans, LA	133?	0	\$1,365	\$1,935

^aMexican attendees at Cuernavaca meetings stayed off-site.

^bDashed lines indicate breakpoints in cost structure:

Meeting increased in length to five nights starting with BLAST V.

Included cost of last night's party starting with BLAST VI; previously passed the hat.

Included credit card fee and administrative staff expenses starting with BLAST IX.

Cost for BLAST VII through X included ground transportation between airport and hotel.

Appendix 2. BLAST Administrative Staff

Meeting	Year	Staff	Funding Source
BLAST I	1991	None	NA
BLAST II	1993	None	NA
BLAST III	1995	Peggy O'Neill	University of Illinois, Chicago
BLAST IV	1997	Peggy O'Neill	University of Illinois, Chicago
BLAST V	1999	Peggy O'Neill	Volunteer
BLAST VI	2001	Peggy O'Neill	Volunteer
BLAST VII	2003	Peggy O'Neill, Tarra Bollinger	Molecular Biology Consortium
BLAST VIII	2005	Peggy O'Neill, Tarra Bollinger, Jasemin Brown	Molecular Biology Consortium
BLAST IX	2007	Peggy O'Neill, Tarra Bollinger	Registration fees
BLAST X	2009	Peggy O'Neill, Tarra Bollinger	Registration fees
BLAST XI	2011	Peggy O'Neill, Tarra Bollinger	Registration fees
BLAST XII	2013	Peggy O'Neill, Tarra Bollinger	Registration fees
BLAST XIII	2015	Peggy O'Neill, Tarra Bollinger	Registration fees
BLAST XIV	2017	Peggy O'Neill, Sarah Van Heusen	Registration fees

Appendix 3. BLAST Boards of Directors

Years	Chair	Directors
~1990 - 2011	Phil Matsumura	Joe Falke, Mike Manson, Sandy Parkinson
2011 - 2012	Bob Bourret	Joe Falke, Mike Manson, Sandy Parkinson
2013 - 2015	Bob Bourret	Mike Manson, Joe Falke, Urs Jenal, Karen Ottemann
2015 - 2017	Bob Bourret	Joe Falke, Urs Jenal, Karen Ottemann, Rasika Harshey
2017 - 2019	Bob Bourret	To be named, Karen Otteman, Rasika Harshey, To be named

Appendix 4. BLAST Meeting Chairs & Vice Chairs

Meeting	Year	Chair	Vice Chair
BLAST I	1991	None	None
BLAST II	1993	None	None
BLAST III	1995	None	None
BLAST IV	1997	Joe Falke	Mike Manson
BLAST V	1999	David Blair	Joe Falke
BLAST VI	2001	Rick Dahlquist	Carrie Harwood
BLAST VII	2003	Carrie Harwood	Bob Kadner
BLAST VIII	2005	Bob Kadner	Ikuro Kawagishi
BLAST IX	2007	Ikuro Kawagishi	David Zusman
BLAST X	2009	David Zusman	Bob Bourret
BLAST XI	2011	Bob Bourret	Urs Jenal
BLAST XII	2013	Urs Jenal	Karen Ottemann
BLAST XIII	2015	Karen Ottemann	Alan Wolfe
BLAST XIV	2017	Alan Wolfe	Birgit Scharf

Appendix 5. BLAST Program Committees

Meeting	Year	Chair	Members
BLAST I	1991	Sandy Parkinson	
BLAST II	1993	Sandy Parkinson	
BLAST III	1995	Sandy Parkinson	
BLAST IV	1997	Sandy Parkinson	Judy Armitage, Jim Hoch, Bob Macnab
BLAST V	1999	Mike Manson	Sandy Parkinson
BLAST VI	2001	Sandy Parkinson	Joe Falke
BLAST VII	2003	Sandy Parkinson	Joe Falke
BLAST VIII	2005	Sandy Parkinson	
BLAST IX	2007	Sandy Parkinson	
BLAST X	2009	Sandy Parkinson	Joe Falke
BLAST XI	2011	Sandy Parkinson	Joe Falke
BLAST XII	2013	Sandy Parkinson	Rasika Harshey
BLAST XIII	2015	Rasika Harshey	Karen Ottemann, Alan Wolfe
BLAST XIV	2017	Rasika Harshey	Alan Wolfe, Birgit Scharf

Appendix 6. BLAST Meeting Review Committees

Meeting	Year	Chair	Members
BLAST I	1991	None	
BLAST II	1993	Jerry Hazelbauer	Howard Berg, Phil Matsumura
BLAST III	1995	Joe Falke	David Blair, Rudy Schmitt, Tom Silhavy
BLAST IV	1997	Mike Manson	Judy Armitage, Jim Hoch, Bob Macnab
BLAST V	1999	Bob Kadner	Chi Aizawa, Rick Dahlquist, Carrie Harwood
BLAST VI	2001	Ann Stock	Bob Bourret, Nyles Charon, Ann West
BLAST VII	2003	Rasika Harshey	Ikuro Kawagishi, Linda Kenney, Janine Maddock
BLAST VIII	2005	Liz Sockett	Lotte Sogaard-Andersen, Urs Jenal, Ruth Silversmith
BLAST IX	2007	Kelly Hughes	Bob Belas, Zhaomin Yang, Igor Zhulin
BLAST X	2009	Brian Crane	Philip Aldridge, John Kirby, Birgit Scharf
BLAST XI	2011	Gladys Alexandre	Sean Crosson, Tarek Msadek, Tom Shimizu
BLAST XII	2013	Alan Wolfe	Christine Josenhans, Kirsten Jung, Chris Rao
BLAST XIII	2015	Lynmarie Thompson	Penelope Higgs, Jun Liu, Birgit Pruess
BLAST XIV	2017	Tino Krell	Sonia Bardy, Ariane Briegel, Simon Rainville

Appendix 7. Published BLAST Meeting Reviews

BLAST I

None

BLAST II

Hazelbauer, G.L., Berg, H.C., & Matsumura, P. (1993) Bacterial motility and signal transduction. *Cell* **73**, 15-22.

BLAST III

Falke, J.J., Blair, D.F., Silhavy, T.J., & Schmitt, R. (1995) BLAST 1995: international conference on bacterial locomotion. *Mol. Microbiol.* **16**, 1037-1050.

BLAST IV

Manson, M.D., Armitage, J.P., Hoch, J.A., & Macnab, R.M. (1998) Bacterial locomotion and signal transduction. *J. Bacteriol.* **180**, 1009-1022.

BLAST V

Aizawa, S.I., Harwood, C.S., & Kadner, R.J. (2000) Signaling components in bacterial locomotion and sensory reception. *J. Bacteriol.* **182**, 1459-1471.

BLAST VI

Bourret, R.B., Charon, N.W., Stock, A.M., & West, A.M. (2002) Bright lights, abundant operons - fluorescence and genomic technologies advance studies of bacterial locomotion and signal transduction: review of the BLAST meeting, Cuernavaca, Mexico, 14 to 19 January 2001. *J. Bacteriol.* **184**, 1-17.

BLAST VII

Harshey, R.M., Kawagishi, I., Maddock, J., & Kenney, L.J. (2003) Function, diversity, and evolution of signal transduction in prokaryotes. *Dev. Cell* **4**, 459-465.

BLAST VIII

Jenal, U., Silversmith, R.E., Sogaard-Andersen, L., & Sockett, L. (2005) Sense and sensibility in bacteria. VIIIth International Conference on Bacterial Locomotion and Sensory Transduction. *EMBO Rep.* **6**, 615-619.

BLAST IX

Belas, R., Zhulin, I.B., & Yang, Z. (2008) Bacterial signaling and motility: sure bets. *J. Bacteriol.* **190**, 1849-1856.

BLAST X

Scharf, B.E., Aldridge, P.D., Kirby, J.R., & Crane, B.R. (2009) Upward mobility and alternative lifestyles: a report from the 10th biennial meeting on Bacterial Locomotion and Signal Transduction. *Mol. Microbiol.* **73**, 5-19.

BLAST XI

Alexandre, G., Crosson, S., Shimizu, T., & Msadek, T. (2011) Bacterial moving and shaking: the 11th BLAST meeting. *Mol. Microbiol.* **81**, 8-22.

BLAST XII

Josenhans, C., Jung, K., Rao, C.V., & Wolfe, A.J. (2014) A tale of two machines: a

review of the BLAST meeting, Tucson, AZ, 20-24 January 2013. *Mol. Microbiol.* **91**, 6-25.

BLAST XIII

Pruss, B.M., Liu, J., Higgs, P.I., & Thompson, L.K. (2015) Lessons in fundamental mechanisms and diverse adaptations from the 2015 Bacterial Locomotion and Signal Transduction Meeting. *J. Bacteriol.* **197**, 3028-40.

BLAST XIV

Appendix 8. BLAST Poster Awards Committees

Meeting	Year	Chair	Members
BLAST I	1991	None	
BLAST II	1993	None	
BLAST III	1995	None	
BLAST IV	1997	None	
BLAST V	1999	None	
BLAST VI	2001	None	
BLAST VII	2003	None	
BLAST VIII	2005	Judy Armitage	Ikuro Kawagishi, Mike Manson
BLAST IX	2007	Nyles Charon	Bob Bourret, Linda Kenney, Rudy Schmitt
BLAST X	2009	Jerry Hazelbauer	Gladys Alexandre, Ruth Silversmith, Alan Wolfe
BLAST XI	2011	Barry Taylor	Kelly Hughes, Karen Ottemann
BLAST XII	2013	John Kirby	Brian Crane, Sean Crosson, Kylie Watts
BLAST XIII	2015	Kylie Watts	Phillip Aldridge, Rick Dahlquist, Jonathan McMurray, Tarek Msadek, John Parkinson, Chris Rao, Yuhai Tu, Laurence Wilson
BLAST XIV	2017	Kylie Watts	Gladys Alexandre, Nyles Charon, Sean Crosson, Rasika Harshey, Mark Johnson, Michael Miller, Birgit Pruess, Thomas Shimizu, Ady Vaknin, Roy Welch

Appendix 9. BLAST Award Recipients

Robert M. Macnab Award for an Outstanding Poster Presentation by a Postdoctoral Scientist

Meeting	Year	Recipient	Mentor & Institution
BLAST VIII	2005 ^a	Tatiana Besschetnova (1st)	Bob Weis Univ. of Massachusetts, Amherst
		Collin Dyer (2nd)	Rick Dahlquist Univ. of California, Santa Barbara
		Roger Alexander (3rd)	Igor Zhulin Georgia Institute of Technology
BLAST IX	2007 ^b	Takanori Hirano	Kelly Hughes University of Utah
BLAST X	2009	Edith Diaz-Mireles	David Bolam Newcastle University
BLAST XI	2011	Pushkar Lee	Howard Berg Harvard University
BLAST XII	2013	Isabelle Hug	Urs Jenal University of Basel
BLAST XIII	2015	John Partridge	Rasika Harshey University of Texas, Austin
BLAST XIV	2017	To be named	?

^aIn 2005, the Macnab Award was the only poster award given. All three recipients turned out to be graduate students. The awards consisted of ???

^aBeginning in 2007, the Macnab award was restricted to postdoctoral scientists and consisted of \$500 plus engraved plaque.

Robert J. Kadner Award for an Outstanding Poster Presentation by a Graduate Student^a

Meeting	Year	Recipient	Mentor & Institution
BLAST IX	2007	Roger Draheim	Mike Manson Texas A & M University
BLAST X	2009	Asharie Campbell	Barry Taylor Loma Linda University
		Kalin Swain	Joe Falke University of Colorado, Boulder
BLAST XI	2011	Wiebke Behrens	Christine Josenhans Hannover Medical School, Germany
BLAST XII	2013	Carmen Friedrich	Lotte Sogaard-Andersen Max Planck Institute for Terrestrial Microbiology

BLAST XIII	2015	Florice Gonzalez	Birgit Scharf Virginia Tech
BLAST XIV	2017	To be named	?

^aAward consisted of \$500 plus engraved plaque

Nucleic Acids Research Award for an Outstanding Poster Presentation by a Young Investigator^a

Meeting	Year	Recipient	Mentor & Institution
BLAST XI	2011	Claudine Baraquet	Caroline Harwood University of Washington
BLAST XII	2013	Naomi Kremer	Dianne Newman California Institute of Technology
BLAST XIII	2015	Award not sponsored	
BLAST XIV	2017	To be named	?

^aAward consisted of \$300 plus engraved plaque

Microbiology Award for an Outstanding Poster Presentation by a Young Investigator^a

Meeting	Year	Recipient	Mentor & Institution
BLAST XIV	2017	To be named	?

^aAward consisted of £150 plus one-year membership in the Microbiology Society and a certificate

BLAST Board of Directors' Award for an Outstanding Talk by a Graduate Student^a

Meeting	Year	Recipient	Mentor & Institution
BLAST XI	2011 ^b	Tu-Anh Huynh	Valley Stewart, University of California, Davis
BLAST XII	2013 ^b	Lewis Evans	Colin Hughes University of Cambridge
BLAST XIII	2015 ^c	Benjamin Webb	Birgit Scharf Virginia Tech
BLAST XIV	2017	To be named	?

^aAward consisted of \$500 plus engraved plaque

^bIn 2011 and 2013, the BLAST Board of Directors' Award was the only award given for talks.

^cBeginning in 2015, the BLAST Board of Directors' Award was restricted to graduate students.

BLAST Founders' Award for an Outstanding Talk by a Postdoctoral Scholar^a

Meeting	Year	Recipient	Mentor & Institution
BLAST XIII	2015	Katja Taute	Thomas Shimizu AMOLF Institute Amsterdam, The Netherlands
BLAST XIV	2017	To be named	?

^aAward consisted of \$500 plus engraved plaque

Robert M. Macnab Memorial Travel Award

Meeting	Year	Recipient	Mentor & Institution
BLAST XII ^a	2013	Ana Martinez del Campo	Georges Dreyfus Universidad Nacional Autónoma de México
		Ambroise Lambert	Mathieu Picardeau Institut Pasteur - Paris, France
BLAST XIII ^b	2015	Matt Baker	Lawrence Lee Victor Chang Cardiac Research Institute, Sydney, Australia
		Dina Tambalo	Chris Yost lab University of Regina, Saskatchewan, Canada
		Yuki Yamanaka	Kaneyoshi Yamamoto Hosei University, Japan
BLAST XIV ^c	2017	Arely Marcos	Georges Dreyfus Universidad Nacional Autónoma de México
		Nitin Kamble	Graham Stafford University of Sheffield

^aAward consisted of double occupancy registration fees plus \$250 reimbursement of travel expenses.

^bAward consisted of \$900 credit toward registration fees.

^cAward consisted of double occupancy registration fees.

Appendix 10. BLAST Websites

Years	Webmaster	URL
? - 2014	Sandy Parkinson	http://chemotaxis.biology.utah.edu/BLAST/
2014 - present	Karen Ottemann & Daniela Keilberg	http://blast.ucsc.edu

Appendix 11. Advice for BLAST XIII Speakers

A primary goal of any speaker should be to clearly communicate with their audience. Successful communication typically requires substantial preparation by the speaker. A sure sign of success is multiple, meaningful questions afterwards. If the end of your talk is greeted by silence, either (1) the audience has so little idea of what your talk was about that they cannot formulate any questions or (2) you explained everything so well that no clarification is necessary. Experience suggests possibility 1 is far more likely. Here are some things to keep in mind as you prepare your talk. Note that these tips apply just as much to senior scientists as to graduate students and postdoctoral scholars.

Audience

Remember that the BLAST audience is:

- *International* - Although everyone at BLAST speaks at least some English, more than a third of the audience at BLAST XII was from countries where English is not the primary language. Although many such individuals are fluent in English, there are also people working in English-speaking countries for whom English is not their primary language.
- *Interdisciplinary* - BLAST attendees typically include biochemists, biophysicists, computer scientists, engineers, geneticists, microbiologists, molecular biologists, and physicists.
- *Young* - A large fraction of BLAST attendees are graduate students and postdoctoral scientists,

It is prudent to think carefully about how you can effectively tell your story to an audience with the characteristics outlined above. What can you do to increase the chance of successful communication?

Length

BLAST talks are strictly limited to 15 minutes in length, with 5 minutes for questions. How will you craft your talk to fit into the time limit?

- It is much harder to give a good short talk than a good long talk. Avoid the temptation to cram 30 or 45 minutes of material that you already have from a previous talk into 15 minutes for BLAST. It may be physically possible for you to talk fast and show lots of slides, but few if any in your audience will understand your message.
- Instead, focus on the key logical elements of your story and relentlessly eliminate non-essential material, even if you worked hard to get the data or make the pretty picture.
- Material that you would love to talk about if only there were more time should go into back-up slides that can be shown in case a pertinent question leads to it.
- If you try to include more information simply by talking faster, you risk losing the substantial portion of your audience that is not completely fluent in English.

Build a logical foundation

Although 15 minutes is not much time, it is prudent to invest some time on features that will help your audience better understand your talk:

- What key background information does the audience need to know to understand the questions you are trying to answer?
- What question(s) are you trying to answer?
- Why do you care about the answer to your question(s)?
- What is the logical connection from each slide to the next?

With this framework in place, the audience will be better able to appreciate and understand your data.

Slides

The design of your slides has a large impact on the success of your talk. In particular:

- Using titles on each slide that summarize the take-home message can help audience members follow your talk. Delivering your message in both written and spoken form helps to reinforce your points. For some people, reading a foreign language (English) is easier to understand than listening. Others may understand English, but not your experiment. In either case, the ability to get the main points simply from reading the slide titles can keep your audience engaged with your talk.
- Can your audience read everything on your slides? There is no point in making the slide content so small that nobody can read it. At BLAST XII, the back of the meeting room was six to seven times farther from the screen than the width of the image. Try viewing your slides from a similar ratio of screen distance to image width and confirm that everything is legible. Better yet, ask your research mentor if he/she can read your slides - vision unfortunately declines significantly with age, even with the help of glasses.
- Similarly, do the colors that you use have sufficient contrast to your slide background to be legible from a great distance?
- Why include material on a slide if you do not plan to talk about it? Such material takes up space (making the important stuff smaller) and is distracting to your audience. Think hard about what you can actually cover within the constraints of your talk and what you should leave out.
- Similarly, it makes little sense to show a small figure while leaving most of the slide empty. Make your content big enough to fill up most of the slide (and hence be easily seen by the audience).
- Figures designed specifically for a paper or a talk often have different features. Although convenient, resist the temptation to simply use unmodified figures from a paper unless you are convinced that your message will survive the change in communication method. Figures from papers often have more details than can be communicated in a short talk and are often illegible when projected on a screen.
- If you have a complex slide, it often helps to build up the picture one piece at a time through animation. This strategy naturally guides the audience to focus on your description of each point. If everything is on the slide from the start, then your audience can be overwhelmed or distracted.

Practice

Prepare your talk far enough in advance of BLAST that you can make meaningful changes if the first version is not very good. Give at least one practice talk to people outside your lab (i.e. people not familiar with your research) and ask them what parts of your talk they could understand and what parts did not make sense. Modify your talk (organization, content, slides, etc.) in response to audience feedback and give another practice talk. Repeat the cycle until your audiences are happy with your talk.

Speaking awards

One reward of effectively communicating your exciting research results to the audience is that you will prompt questions, suggestions, ideas, etc. that could improve your future research. In addition, there will be \$500 speaking awards at the BLAST meeting for the best talk by a graduate student and by a postdoctoral scholar. Good luck! 😊