Goals for this session

Learn to use the NIH and other databases to identify prospective collaborators

Learn how to find contact information for American scientists at universities and national laboratories

Learn how to use the Thomas Register to identify prospective commercial partners and find contact information for companies
Finding a prospective scientific collaborator is a three-step process

Step 1: Find out who is doing similar work

Step 2: Get an address

Step 3: Write and ask

Step 1: Who’s doing similar work?

Check the technical literature

Explore databases of funded projects

Review conference programs
Use the same technical-literature resources, but this time get authors’ names and affiliations

Journal articles
Technical reports
ePrint servers
Abstract databases
Dissertation databases

Anybody who published a technical paper is a prospective collaborator—find someone whose work is most closely related to your own

You’ve found an interesting paper, and the author might be a prospective collaborator
Type the author’s name and affiliation into Google

Use the NIH CRISP database to find prospective collaborators

- Get PI names, titles, and affiliations
- Read abstracts of funded projects
- Differentiate between currently funded projects and completed projects

Go to [http://crisp.cit.nih.gov/](http://crisp.cit.nih.gov/) and click on the “Go to the CRISP query form” button

Type keywords into the “Enter search terms” field
Searching tips for CRISP—web math doesn’t work

The % is symbol is a wildcard; use to expand the keyword search

Congratulations! You’ve found 198 projects!

Abstract

Ion channels govern the activity of the beating brain, beating heart, contracting muscle, and every cell of the body. They are targets of many therapeutic agents: mutations of ion channel genes are cause of disease of inborn diseases, including cardiac arrhythmias and neurological diseases. Many of these ion channels are opened in response to changes in voltage across the cell membrane. The central long-term aim of this proposal is to understand the molecular mechanism of voltage gating of ion channels. We recently discovered an ion channel in bacteria (NaCl/Cl) that has many of the properties of an important class of ion channels in humans: it is selectively permeant to sodium, opened (gated) by changes in membrane voltage, and inactivated in a time-dependent manner after voltage-dependent gating. NaCl/Cl is unique in being the only voltage-dependent ion channel that can be expressed and studied in a mammalian cell line. This is important because bacterial channels are the most likely sources of sufficient protein for high-resolution structural studies (X-ray crystallography). The NaCl/Cl protein has been crystallized and is likely to yield high-resolution structural data. It is thus crucial to investigate the structure and function of the ion channel through a combination of mutagenic and electrophysiological studies. Information gained about its ion selectivity, voltage gating, and inactivation can then be directly correlated to the structure when obtained. Understanding this relatively simple ion channel will help us understand how the larger class of channels function, and eventually how we might target them with therapeutic agents.
Two other government databases can help you find prospective collaborators

National Science Foundation
http://www.nsf.gov/awardsearch/index.jsp
The NSF does not fund medical research or any research associated with human disease; it does fund basic biological, biochemical, biophysical, and bioengineering research

Biological and Environmental Research/DOE
http://www.osti.gov/oberabstracts/index.jsp
The DOE supports research at the national laboratories and at universities on environmental and biomedical topics

National Science Foundation
http://www.nsf.gov/awardsearch/index.jsp

* is the wildcard
Congratulations! You’ve found 11 projects

Most NSF projects are funded for three years.

The award summary gives information about the grant

NSF Award Abstract - #0131788

A Novel Class of Peptide Toxins from Coons, California: Biological Activities and Mechanisms of Production

PI’s name, email, and institution
Abstract

Marine cone snails of the genus Conus are predators that paralyze their prey by injecting potent neurotoxins. These toxins are peptides (11-45 amino acids long) that target ion channels crucial for normal electrochemical activity in nerve and muscle cells. A novel toxin has been discovered in one species, Conus californicus, which is a non-alarine predator on worms, snails and fish. This toxin blocks nerve transmission by targeting voltage-gated sodium channels. This project uses biochemical, biophysical, and molecular approaches to elucidate the chemical structure of this peptide toxin, its mechanism of action, and its specificity profile, and to localize and clarify the basic biology of the venom production in this animal. Results will be important in developing a new experimental reagent for basic research on channels, and in understanding how different toxic peptides are made and used by these animals in a biologically relevant context. The lab also will continue important multidisciplinary training of undergraduates in neuroscience.

Can search in title, PI, F/Y, or institution
AAAAACK! No results!

OBER funds research primarily on carbon sequestration, climate change, and environmental remediation science

http://www.er.doe.gov/production/ober/ober_top.html

The two dissertation repositories can be a source of prospective partners

Center for Research Libraries
http://www.crl.edu/catalog/index.htm
Type the author’s name into Google
Conference programs are a source of prospective collaborators

Some websites maintain conference calendars

FASEB conference calendar
http://www.faseb.org/meetings/default.htm

Check webpages of professional societies for “meetings”
http://www.lib.uwaterloo.ca/society/subjects_soc.html
Using a conference program to identify a prospective collaborator

Speakers

Hlonke Vonlan, Purdue University
Organic Nanotubes with Tunable Dimensions and Properties

Jan Greer, North Carolina State University
Material Templating through Abrupt-bound Molecular and Macromolecular Gradients

Charles Isgum, IBM T. J. Watson Research Center
Layer-by-layer Construction of Molecular Materials and Devices

Marta Liberman, University of Notre Dame
Molecular Quantum-dot Cellular Au Computation without Current

Mark L. Seabron, Purdue University
Carbon Nanotube Electronics: Device Physics, Technology, and Applications

Seth Holder, University of Arizona
Two-Photon Micro and Nanofabrication of 1D Structures

Susan S. Simon, University of Florida
Nanometer-Scale Engineering of Composites
Step 2: You’ve identified a prospective collaborator, now how do you find his address?

Use the web to obtain email and postal addresses of collaborators

Most US universities and national labs have directories of the people who work there

Look for “Directories,” “Staff,” “Phone Book,” “Faculty” (at universities), “Employee Locator” (at national labs)

Type in the surname only of the person you wish to find

Directory of U.S. universities
http://www.google.com/options/universities.html
URLs for US national labs are intuitive

Lawrence Livermore National Laboratory
http://www.llnl.gov

Oak Ridge National Laboratory
http://www.ornl.gov

Brookhaven National Laboratory
http://www.bnl.gov

Argonne National Laboratory
http://www.anl.gov

Lawrence Berkeley National Laboratory
http://www.lbl.gov

Pacific Northwest National Laboratory
http://www.pnl.gov
Use the “directories” to find people at the national laboratories

Find “Phone Book”

Submit “Query”

Leo J Bitteker Jr
E-mail Address: bli@lanl.gov
Work Phone: +1 256 544 1611
Fax Number: +1 256 544 5926
Use the science pages at the national labs, too

Biology and Biotechnology Research Program

Select from the abstracts below, which highlight recent research in the BREP program:

- Comparative analysis of the sequence of human chromosome 19 and related mouse regions
  Lisa Stabio

- High throughput analysis of gene and protein expression in seconized tumor
  Xiaochun Lu and Lisa Stabio

- The Biological Aerosol Entry and Information System (BASEIS)
  Mark Wenzel and Paula McCreary

- The Autonomous Pathogen Detection System (APDS)
  Richard Langlies

- Use of Suppression Subtractive Hybridization as a Tool for Microbial Genomic Comparisons
  Gary Anderson, Lindsey Fidock and Peter Argos
Finding Elizabeth Robertson at Harvard
http://www.harvard.edu

Faculty directory

Enter surname

Online Phonebook Query Results

Query Requested: "name=Robinson"

Andrew Scott Robertson
Telephone: 617-495-2176
Address: 230 Dunster Mail Center
Cambridge, MA 02138
Residence: 140 High St.

[phone number] (Prof)
[phone number]
Department: BIOBC2
Office: Bio, Labs 125, 06C
Email: arobertson@fas.harvard.edu

Elizabeth Robertson (Prof)
[phone number]
[phone number]
Department: BIOBC2
Office: Bio, Labs
Email: eproctor@fas.harvard.edu
Use the Thomas Register to identify prospective commercial partners and find company contact information

US equipment manufacturers

http://www.thomasregister.com/

European equipment manufacturers

http://www.tremnet.com/

Must “register” to search, but it is free of charge

First you must register and log-in

Type in keywords

Welcome to ThomasRegister.com

Welcome back Callie M. Elliott

I am searching for:

For help with your search, please try our Search Tips

- Product or Service
- Company Name
- Brand Name
- Containing the words
- Water pollution co

Find It
View the “results”

494 prospective partners!!
Check other Internet resources
U.S. companies seeking long-term FSU commercial partners (in Russian)
http://bisnis-eurasia.org/

Practical advice from CRDF
http://www.crdf.org/Industry/findpartners.html

Information about larger U.S. companies (financial data, products, competitors, locations, patents)
http://www.hoovers.com/

Step 3: You’ve identified a possible collaborator and found his address. Now what do you say?

Stay tuned…
Let’s review what we’ve learned…

✔ How to use the NIH, NSF, and OBER databases to find collaborators
✔ How to use meeting programs
✔ How to find contact information for American scientists working at universities or the national laboratories
✔ How to use the Thomas Register to find prospective commercial partners and contact information for U.S. companies
✔ Other sources of information for business collaborations