Joint Post-doctoral Fellowship Program between the American Type Culture Collection (ATCC) and the University of Virginia (U.Va.)

Request for Proposals (RFP ATCC-UVA 1-15-2012)

We are pleased to announce an RFP for a new postdoctoral fellowship program that will be jointly operated by ATCC and U.Va. In the initial year, three (3) fellowships will be funded for a period of two (2) years in their entirety by ATCC. The primary goal of this program is to provide a unique training experience to postdoctoral scientists who wish to explore working at the interface between academic and industrial settings, applying pioneering technology to create practical solutions and tools relevant to biomedical science and biotechnology research.

We invite you to submit brief research proposals that map to one or more of the six Research Themes of Interest outlined in the list below. Each postdoctoral fellow will have two sponsors – a U.Va. faculty member and an ATCC staff scientist – who will jointly direct and advise the research project. Each Fellow shall spend a minimum of nine (9) months, but no more than twelve (12) months, of the fellowship at U.Va. and the remainder of the time at ATCC, with the work at ATCC to be conducted on site at an ATCC facility (Manassas, Va., or Gaithersburg, Md.). In addition, an agreement on IP and revenue sharing has been reached between ATCC and the U.Va. Licensing & Ventures Group, enabling a path for open and collaborative research between the two organizations.

A maximum of three (3) proposals will be funded in year 1, with another three (3) proposals funded in Year 2, for a running total of six (6) postdoctoral fellowships funded on a continuing basis. Only one postdoctoral fellowship will be awarded per ATCC scientist or U.Va. faculty member. Renewal of second-year funding will require submission of a satisfactory progress report as well as a scientific presentation by the postdoctoral fellow to the Oversight Committee.
Research Themes of Interest:

1) Genetic engineering of biomaterials: Application of biosensors, pathway perturbation, new transgenic model organisms (esp. human pathogens), use of in situ gene editing technology (AAV), synthetic biology, new applications using GFP, HaloTag or NanoLuc reporters.

2) Novel materials and methods for cell culture research: New growth substrates/scaffolds, 3D tissue culture models, scale-up systems, new cryopreservation methods, culture systems for difficult-to-grow microorganisms, experiment-efficient packaging and shipping technology, biostabilizers, novel bioinactivation reagents, improved media bottle design.

3) Genomics-driven analysis of novel biomaterials: Gene/pathway discovery in commercially-important organisms, microbiome-related research, antibody development using deep RNAseq from lymphoblasts, informatics studies using existing data sets related to ATCC bioassets.

4) Assay methods for disease biology: Use of primary and immortalized cell types for key biological processes (especially related to cell health and drug ADMET), methods for generating stabilized/non-frozen “assay-ready” cells, novel tissue culture models of host-pathogen relationships, new affinity probes for drug targets.

5) Technology solutions for biologics production: New systems for protein or virus production, purification enhancement schemes, improved media formulations, biosensors for process monitoring.

6) Standards in biological research: Creation of biomaterials and/or measurement methods to generate reference standards relevant for improved comparative bioresearch studies, new/improved reference standards for applied life sciences (diagnostics, food testing, environmental testing), development of data standards for key biomaterials.

Funding amounts: We anticipate funding three (3) fellowships in the initial round. The maximum annual budget that will be provided for each fellowship consists of approximately $90,000 direct costs/year: this amount will cover an annual salary of $50,000, paid benefits, a supply budget of $20,000, and a $2,500 travel/relocation allowance. Fellowships will be eligible for renewal for a second year of support at the same funding level.
**Key dates (2012):**

- Announcement of the request for proposals: March 15
- ATCC at U.Va. to answer questions: March 27
- **Deadline for receipt of Proposals:** May 1
- Review of proposals: May 1-15
- Faculty “pitch session” for selected proposals: May 21-24 (date TBD)
- Selection of funded Proposals: May 29
- Notify faculty of decisions: May 30
- Working session between individual U.Va. and ATCC sponsors to finalize project plan: May 30-June 8
- Recruitment of fellowship candidates: June 12-June 18
- **Start date for ATCC-U.Va. Fellows:** July 1

To be eligible for participate in this program as a postdoctoral fellow or as a U.Va. faculty sponsor, you must submit your proposal(s) to Sharon Krueger (sharonkrueger@virginia.edu) by Tuesday, May 1, 2012, at 5 p.m. EDT. See “Application Procedures and Format” for detailed submission instructions.

**Application Review Criteria:**

The goal of these fellowships is to create a unique postdoctoral training experience allowing candidates to work in both academic and industrial R&D settings, where they will gain first-hand experience in technology translation related to specific topics in cell biology and microbiology. Projects focused on the application of technology to one of the six (6) Research Themes of Interest, and also relevant to ATCC’s core mission as a global biomaterials resource center, will receive highest priority for funding.

The criteria to be applied in evaluating the merits of the grant applications include:

- Potential of the project to create enabling tools or information for the life sciences
- Alignment of research objectives between U.Va. faculty and ATCC organizational priorities (as outlined in the Research Themes of Interest listing)
- Potential for peer-reviewed publication
- Feasibility of achieving the project aims within the project funding period and with the resources available
Application Procedures and Format:

Your application must include the following:

1. Front page with title of project, name of faculty sponsor, postdoctoral fellowship candidate (if known), academic department and rank, and e-mail, phone, and mailing addresses. Include signatures of the sponsor and department chair or center director. Also identify the ATCC Targeted Research Area (select from items 1–6). Include an NIH CV and grant support list for the sponsor, and a resume for any fellowship candidates.

2. An abstract of your proposal (250 words or less) on a separate page.

3. Research proposal (maximum of three pages, use NIH continuation pages and formatting guidelines). Include the following sub-sections (label as 3a–3d) – if a subsection is not relevant to your proposal list the section and indicate “not applicable”:
   a. Definition of project deliverables. Crisply call out expected outcomes of the two-year fellowship project, particularly any specific biomaterials, organisms, or processes/methods that would be developed. Also suggest progress milestone(s) for the six-, 12-, and 18-month time points during the fellowship.
   b. Background description of the technology platform to be utilized. A summary of the technology, with key literature references.
   c. Explanation of relevancy and fit of the technology for the expected project deliverable. Describe why said technology approach is well suited to obtaining the research objectives.
   d. Statement on significance of the project to U.Va. sponsor’s research program. Describe how the proposed fellowship project will advance your research program. Include anticipated benefits from scientific interactions with ATCC.

Applications must be sent electronically and via hard copy as follows:

- E-mail your proposal in PDF format to Sharon Krueger (sharonkrueger@virginia.edu) no later than 5 p.m. on May 1.
- Mail a hard copy of your proposal, postmarked by May 1, to Sharon Krueger, P.O. Box 400896, Charlottesville, VA 22904-4896.

Please note that incomplete applications may not be reviewed. Applications will not be deemed complete unless the hard copy is postmarked by May 1 and the corresponding PDF is received before 5 p.m. on May 1. With questions, call Sharon Krueger at 434-243-1407.