



Assistant Director's Comments - 2011 Dean A. Dunn, Ph.D.

Here at the ACS Petroleum Research Fund, we are often asked "What makes a competitive proposal?" Under the charter that created the PRF Trust, the American Chemical Society Petroleum Research Fund "shall use all funds exclusively for advanced scientific education and fundamental research in the petroleum field."

There are three important aspects to the limitations: (1) The term 'petroleum field' is in quotation marks, and is defined in the PRF Trust charter as "petroleum, petroleum products and natural gas," and "substitutes for petroleum and petroleum products from natural gas, coal, shale, tar sands and like materials." No matter what the scientific discipline of the research, ALL proposals to ACS PRF must be directly petroleum-relevant.

- (2) Only fundamental research is supported, and "applied research" is outside the scope of the PRF Trust. ACS PRF supports "petroleum science and engineering" and NOT "petroleum industry" research which is applied and thus "not fundamental." The ACS PRF Website contains a list of areas of research interest, and topics which are NOT supported by ACS PRF.
- (3) Advanced scientific education means that "student support" is the most-valued use of ACS PRF funds. This includes post-doctoral fellowships, graduate stipends, graduate tuition, and/or undergraduate research assistants; the bulk of the requested budget should be for student support.

In general, ACS PRF grants provide "seed money" to enable an investigator to initiate a "new direction in research." With an ACS PRF grant, the PI may obtain the "proof-of-concept" data set, which is needed for a proposal to another agency that provides continuation research support. For new Ph.D.'s, the DNI/UNI "starter grants" provide two years of support to let the Principal Investigator start their own independent research, which is different from their doctoral and/or any post-doctoral research. For investigators beyond the 3-year eligibility term for New Investigator grants, ACS PRF provides the funds for a "new research direction" - one in which the PI has neither previous research funding, nor has extensively published in. If the ACS PRF Advisory Board feels that a proposal "is not a new direction for the PI", they won't fund it, regardless of the merits of the proposed research.

Finally, the Advisory Board is looking for hypothesis-based proposals; "exploratory research" is not competitive - "If we study xxx, we will better understand xxx " is NOT likely to be funded, because this is not a testable hypothesis. A better approach would be "This is our hypothesis..., and here is how we will obtain the data to test this hypothesis."

If you have any discipline-specific questions about proposals to ACS PRF, please contact the appropriate Program Manager. Our Website (www.acsprf.org) has a list of our Program Managers, and the scientific/engineering areas covered by each person.

Please contact us if you have any questions. I hope to hear from you.