

# **Guided Tour of the NIH Peer Review Process**

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Center for Scientific Review, National Institutes of Health

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## **Presenter Disclosure Information**

Denise R. Shaw, PhD

No relationships to disclose



# Center for Scientific Review (CSR)

- Serves as central receipt point for grant applications submitted to NIH and some other DHHS agencies
- Assigns applications to CSR review groups/study sections or to an Institute (such as NCI or NIAID) scientific review group
- Assigns applications to NIH Institutes/Centers as potential funding components
- Conducts initial scientific merit review of most research applications submitted to the NIH in about 240 Study Sections and regularly recurring Special Emphasis Panels



# **CSR Peer Review – Fiscal Year 2016**

- 92,000 applications received
- 60,000 applications reviewed
- 18,000 reviewers
- 247 Scientific Review Officers

1,600 review meetings









# **NIH Peer Review System for Grant Applications**



First Level of Review

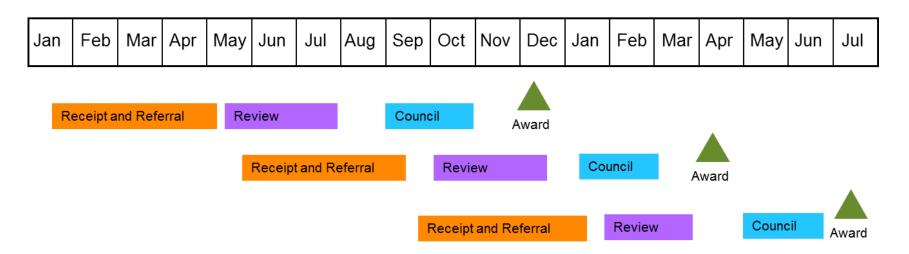
Scientific Review Group (Study Section)

Second Level of Review NIH Institute/Center Council



# **Overall Timeframe from Submission to Award**

There are three main overlapping cycles per year



http://grants1.nih.gov/grants/funding/submissionschedule.htm



# Integrated Review Groups (IRGs) and SRGs (Study Sections)

# Each IRG contains a cluster of study sections around a general scientific area.

- Brain Disorders and Clinical Neuroscience IRG [BDCN]
- Immunology IRG [IMM]
- Oncology 1 Basic Translational IRG [OBT]
- Oncology 2 Translational Clinical IRG [OTC]

- Basic Mechanisms of Cancer Therapeutics Study Section [BMCT]
- Cancer Biomarkers Study Section [CBSS]
- Chemo/Dietary Prevention Study Section [CDP]
- Cancer Immunopathology and Immunotherapy Study Section [CII]
- Clinical Oncology Study Section [CONC]
- Drug Discovery and Molecular Pharmacology Study Section [DMP]
- Developmental Therapeutics Study Section [DT]
- Radiation Therapeutics and Biology Study Section [RTB]



### **Assisted Referral Tool (ART)**

https://art.csr.nih.gov/ART/selection.jsp

Choose study section vs. IRG search.



#### Assisted Referral Tool (ART)

Please make a selection:

Recommend study sections directly

You will be given a list of the best matching of the 169 active SRG panels\*.

O Recommend IRG first followed by study sections

You will first be given a list of the best matching Integrated Review Groups. You may then select the study sections within those IRGs to perform second-tier matching against the selected study sections.

O Recommend SBIR/STTR Special Emphasis Panels

If you are applying for a SBIR/STTR grant, select this option.

\* Currently, the following SRGs are not available in ART: CHSA, CHSB, ARM, and IPTA.

Continue

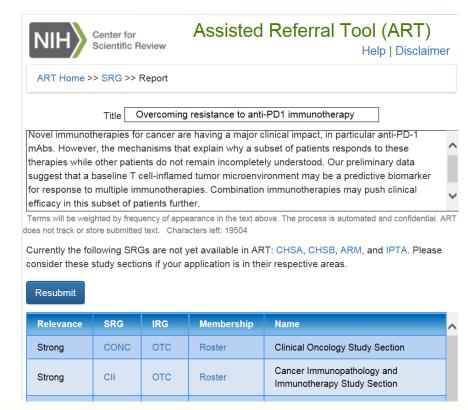


### **Assisted Referral Tool (ART)**

https://art.csr.nih.gov/ART/selection.jsp

Enter application title and text to get recommended CSR study sections for your project.

Click on the SRG to view study section descriptions. Click on roster to view current study section members.





CSR website search for IRG, study section or simple scientific terms <a href="https://public.csr.nih.gov/StudySections/Pages/default.aspx">https://public.csr.nih.gov/StudySections/Pages/default.aspx</a>

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					Search this site.
About CSR	Applicant F	Resources	Reviewer Resources	Study Sections	Rosters an
Integrated Rev	iew Groups	Standing	Small Business and Techr	nology Transfer	Fellowship
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#### **CSR Meeting Rosters - CII** Click on meeting dates to view meeting rosters. Meeting rosters list all members present, whether permanent or temporary, and provide the total scope of expertise that may be present at the meeting on that date. The most current and two prior rosters are provided when available. Current rosters are posted 30 days before the meeting date and are tentative only, pending any last minute changes. The View Membership Roster link shows the membership roster of chartered members only. View Membership Roster Study Section Acronym SRO **Meeting Rosters** 06/15/2017 03/02/2017 10/20/2016 CII Shaw, Denise (Roster) (Roster) (Roster)





### **Use the Optional Assignment Request Form**

Request awarding component (funding institute/center)

PHS Assignment Request Form ONE trumper 0825-0001 View Burden Statement Expression Date: 10/31/2018 Funding Opportunity Number: Funding Opportunity Title: Awarding Component Assignment Request mollosell If you have a preference for an Awarding Component (e.g., filth institute/Center) assugnment, please use the kink below to identify the most appropriate assugnment then enter the short

abbreviation (e.g., NC) for National Carcer (institute). In "Assign turbo Not Assign To Awarding Component" sections percei. Your first choose should be in column 1. All requests will be considered, however, locus of review is predetermined for some applications and assignment requests cannot always be honored

information about Awarding Components can be found here: https://guirts.rsh.gov/glaints.tms.assignment.information.htm#//www.inrig.Components



If you have a preference for a study section assignment, please use the link below to sterrify the most appropriate study section then enter the short attace-valon for that study section in Vissign to/Do not Assign to Study Section" sections below. Your first choice should be in column 1. All requests will be considered, however, loous of review is predetermined for some

For example, you would enter "CAMP" if you wish to request assignment to the Cancer Molecular Pathoticology study section or enter "ZRG1 HDM R" if you wish to request assignment. to the Healthcare Delivery and Methodologies SBRISTTR panel for informatios. Be cereful to accordinly cepture all formatting (e.g., spaces, hypriens) when you type in the request.

PHS Assignment Request Form

Only 1000 characters allowed

information about Study Sections can be found feere intigat/grants.nls govignostating\_assignment\_information.nlm#Study Section

Request study section assignment



### **Identify conflicts**



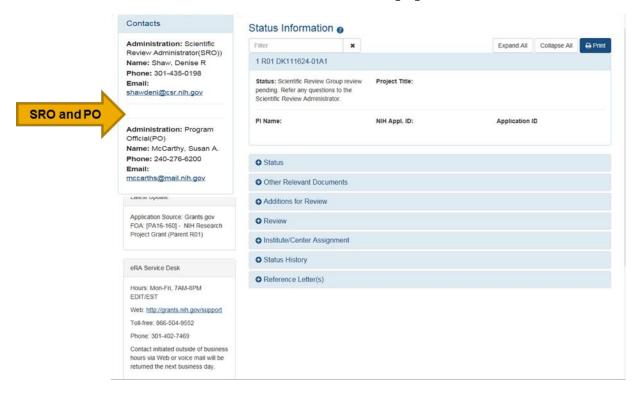
identify Scientific areas of expertise needed to review your application (optional) Note: Please do not provide awares of individuals

Suggest areas of expertise

1111-1111	36	2	3	4	\cdot
Expertise Only 40 characters allowed					

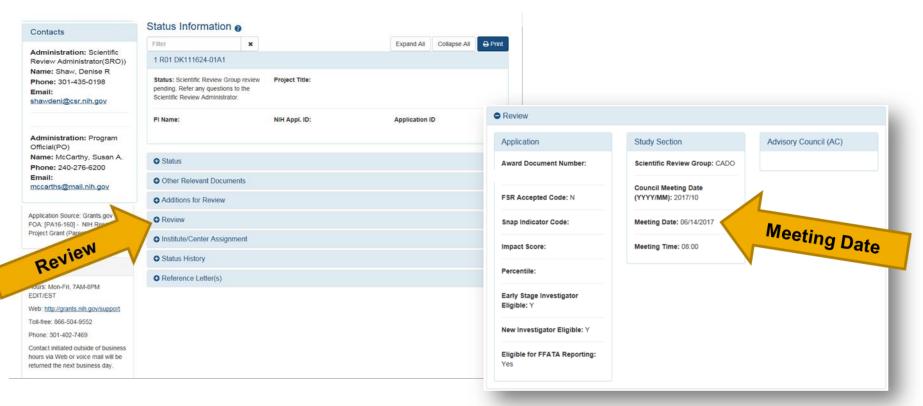


# Check the Status of Your Application in NIH eRA Commons





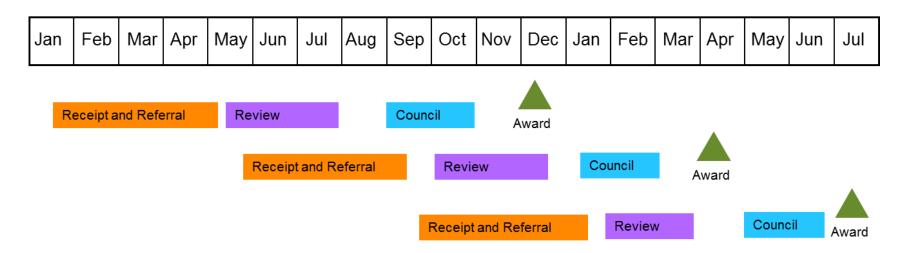
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# **Overall Timeframe from Submission to Award**

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### **Peer Review in CSR**

- CSR Study Sections are managed by a Scientific Review Officer (SRO) who is a doctoral-level professional, whose scientific background is close to the focus of the study section.
- Each CSR standing study section has 12-25 regular members who are from the scientific community.
- Temporary members are recruited by the SRO as needed.
- About 60-100 applications are normally reviewed at each study section meeting.



# How Reviewers Are Selected for Study Section Service

- Demonstrated scientific expertise and research support
- Doctoral degree or equivalent
- Mature judgment
- Work effectively in a group context
- Breadth of perspective
- Impartiality
- Representation of women and minority scientists
- Geographic distribution



# **Before the Study Section Meeting**

- Each application is assigned to 3 or more reviewers 5-6 weeks before the meeting
- Reviewers assess each application by providing:
  - A preliminary Overall Impact score
  - Criterion scores for each of the 5 core review criteria
  - A written critique
- Reviewers have access to other reviewer critiques and scores before the meeting to prepare for meeting discussions



# 9-point scoring scale is used to provide:

Criterion Scores for each of the 5 core review criteria

Overall Impact/Priority Score -based on but not a sum of the core criterion scores plus additional criteria

Impact	Score	Descriptor
	1	Exceptional
High Impact	2	Outstanding
	3	Excellent
	4	Very Good
Medium Impact	5	Good
	6	Satisfactory
	7	Fair
Low Impact	8	Marginal
	9	Poor



# **Scoring**

### **5 Core Review Criteria**

- Significance
- Investigator(s)
- Innovation
- Approach
- Environment

# **Overall Impact**

Assessment of the likelihood for the project to exert a sustained, powerful influence on the research field(s) involved

Each scored from 1-9

Scored from 1-9

There is no mathematical relationship between the 5 criterion scores and Overall Impact score



# **Reviewer Conflicts of Interest (COI)**

### What Constitutes a Reviewer COI?

- Institutional
- Family member/close friend
- Collaborator
- Longstanding scientific disagreement
- Personal bias
- Appearance of conflict

http://grants.nih.gov/grants/peer/peer\_coi.htm



# At the Meeting



#### **Order of Review**

- The average of the preliminary Overall Impact score from the assigned reviewers determines the review order
- Discussions start with the application with the best average preliminary Overall Impact score

#### **Clustering of Review**

- New Investigator R01 applications are clustered
- Clinical applications & other mechanisms (e.g., R21s) may be clustered

### **Not Discussed Applications**

- About half the applications will be discussed
- Applications unanimously judged by the review committee to be in the lower half are not discussed



# At the Meeting: Application Discussion

- Any member in conflict with an application leaves the room
- Reviewer 1 introduces the application and presents critique
- Reviewers 2 and 3 highlight new issues and areas that significantly impact scores
- All members without a conflict are invited to join the discussion and then vote on the final overall impact score





# Scoring of Discussed and Not Discussed Applications

- Reviewers discuss about half of the applications, beginning with the best.
- The panel will discuss any application any reviewer wants to discuss.
- Discussed applications receive an overall score from each panel member (excluding conflicts). The scores are averaged to one decimal place, and multiplied by 10. The 81 possible priority scores thus range from 10-90.
- All applications receive criterion scores. Not discussed applications will receive initial criterion scores from the three assigned reviewers.



# **After the Meeting**

# The SRO checks final overall impact scores and releases them for posting to the application eRA Commons site

 Scores are available to applicants generally within 3-4 days after the meeting.

# The SRO compiles reviewer critiques and, for discussed applications, writes a Summary of Discussion for the summary statement

- Summary statements are released for posting in the application eRA Commons site generally within 30 days after the meeting.
- Applicants should contact their assigned Program Officer not the SRO with any questions or concerns regarding scores or summary statements.



#### Program Officer

SUMMARY STATEMENT PROGRAM CONTACT:

Susan McCarthy Ph.D. 240-276-6200

mccarths@mail.nih.gov

( Privileged Communication )

Release Date: 10/03/2014

Application Number: 1 R01 CA#####-01A1

Revised Date: 10/03/2014

**Summary Statement** 

Principal Investigator

SMITH, JANE PHD

Applicant Organization: STATE UNIVERSITY

Review Group: CII

Cancer Immunopathology and Immunotherapy Study Section

Meeting Date: 09/29/2014 Council: JAN 2015

RFA/PA: PA13-302 PCC: 2PIM

Requested Start: 04/01/2015

Dual IC(s): Al

Human and **Animal Subjects** status

Project Title: Improving Cancer Immunotherapy

SRG Action: Impact Score: 21 Percentile: 7 Next Steps: Visit http://grants.nih.gov/grants/next\_steps.htm

Human Subjects: 10-No human subjects involved

Animal Subjects: 30-Vertebrate animals involved - no SRG concerns noted

Impact Score and Percentile (if applicable)

Project	Direct Costs	Estimated
Year	Requested	Total Cost
1	250,000	412,435
2	250,000	412,435
3	250,000	412,435
4	250,000	412,435
5	250,000	412,435
TOTAL	1,250,000	2,062,174

ADMINISTRATIVE BUDGET NOTE: The budget shown is the requested budget and has not been adjusted to reflect any recommendations made by reviewers. If an award is planned, the costs will be calculated by Institute grants management staff based on the recommendations outlined below in the COMMITTEE BUDGET RECOMMENDATIONS section.

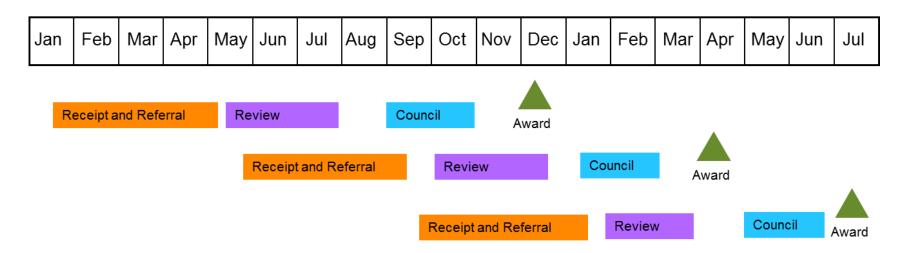
NEW INVESTIGATOR

New and Early Stage Investigator status



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# **CSR Applicant Resources**

https://public.csr.nih.gov/ApplicantResources/Pages/default.aspx



#### **NIH Tips for Applicants**

APPLICANTS

Reviewers give applicants practical advice and insights.

#### **Policy Changes**

- » Reminder: NIH Natural Disaster Policy -Hurricane Irma
- » Notice of Assistance Available to Institutions Impacted by Hurricane Harvey
- » Reminder: NIH Natural Disaster Policy -Hurricane Harvey
- » New Appendix Policy Related to Clinical Trial Applications Due on or After Jan. 25

#### **Grant Process**

Planning, Writing, & Submitting Receipt & Referral

Peer Review

- Initial Level of Review



» For Applicants

### **Become a Reviewer**

- Check Out Our Early Career Reviewer Program: <a href="www.csr.nih.gov/ecr">www.csr.nih.gov/ecr</a>
- Contact a CSR Scientific Review Officer: Send them your CV
- Let Us Try to Find a Good Review Group for You: Send your CV to <u>csrvolunteer@mail.nih.gov</u>



