Limited Competition RFA for the IARC Monographs for the Evaluation of Carcinogenic Risks to Humans

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Purpose

• Limited competition RFA for the Monograph program at the International Agency for Research on Cancer (IARC)
• IARC Monographs- critical scientific evaluations of carcinogenic hazards to humans
• NCI support since 1982 via an U01 award
• IARC award not previously associated with a funding announcement but is now required
• This RFA will enable submission of a renewal application
IARC Monograph Process

- Types of agents considered
  - Chemicals and chemical mixtures
  - Physical and biological agents
  - Occupational exposures and lifestyle factors
- Prioritized by Advisory Group
- Criteria
  - Extent of human exposure
  - Suspicion of carcinogenicity
  - Public health relevance or public concern
  - New or unpublished studies
IARC Monograph Process

- Working Group reviews literature comprehensively
  - Exposure data
  - Cancer epidemiology studies
  - Cancer bioassays in animals
  - Mechanistic data
- Determination based on weight of evidence
- Three Working Groups per year (NCI funds two)
- Volumes freely available as PDFs
Agents Evaluated or Planned

• High concern
  - Shift work, Radiofrequency EMFs, Motor vehicle exhaust

• Global/Low-Middle Income Countries
  - Indoor combustion/cooking, *Schistosoma haematobium*, Areca nut, Chinese-style salted fish

• New & high priority for 2015-2019
  - Bisphenol A, Aspartame, Indium tin oxide, Nicotine/e-cigarettes
IARC Monograph Program

- Authoritative - used by health agencies and institutions worldwide
- Well respected - high scientific rigor, independence, and transparency
- Relevant - considers agents of current wide exposure or of high public concern
- Global - evaluates agents of international concern
- Over 900 agents evaluated by 109 Working Groups
Portfolio Analysis

• Unique NIH award

• US carcinogen identification programs
  - Report on Carcinogens (NTP, NIEHS)
  - Integrated Risk Information System (EPA)

• IARC contrasts
  - Broader number and type of agents evaluated
  - Agents of global concern, especially LMICs
  - Frequently the first to evaluate an agent

• IARC complements
  - Involves US agencies (EPA, NIH, CDC) in evaluations and exchange of information
FOA Justification

- **RFA**
  - Limited competition - uniquely positioned institution
  - Review by NCI special emphasis panel
- **U01 (NCI interaction)**
  - Recommend agents for evaluation
  - Identify resource individuals in US
  - Attend or participate in Working Group meetings
Requested Set Aside

- $859,000 TC/year for 5 years
- $4,295,000 total
- Based on current award
- Allocation
  - IARC personnel 80%
  - Convening Working Groups 20%
## IARC vs Report on Carcinogens

### IARC

<table>
<thead>
<tr>
<th>Risk to Humans</th>
<th># Agents</th>
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<tbody>
<tr>
<td>Carcinogenic</td>
<td>113</td>
</tr>
<tr>
<td>Probably carcinogenic</td>
<td>66</td>
</tr>
<tr>
<td>Possibly carcinogenic</td>
<td>285</td>
</tr>
<tr>
<td>Not classifiable</td>
<td>505</td>
</tr>
<tr>
<td>Probably not carcinogenic</td>
<td>1</td>
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</tbody>
</table>

### Report on Carcinogens

<table>
<thead>
<tr>
<th>Carcinogenicity</th>
<th># Agents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Known</td>
<td>54</td>
</tr>
<tr>
<td>Reasonably suspected</td>
<td>186</td>
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