

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

Ron Johnson, PhD  
Program Director  
Division of Cancer Biology

# 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  - New or unpublished studies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 world wide
- 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

Risk to Humans	# Agents
<i>Carcinogenic</i>	113
<i>Probably carcinogenic</i>	66
<i>Possibly carcinogenic</i>	285
<i>Not classifiable</i>	505
<i>Probably not carcinogenic</i>	1

## Report on Carcinogens

Carcinogenicity	# Agents
<i>Known</i>	54
<i>Reasonably suspected</i>	186