

DECLARATION OF PERSONAL INTERESTS

POLICY

It is ICNIRP's aim to provide guidance and recommendations on protection from non-ionizing radiation exposure based on thorough professional evaluation of the published scientific literature. To achieve this goal, ICNIRP relies on the scientific knowledge and judgment of independent experts. For ICNIRP it is imperative to avoid that personal interests of its members affect the independence of ICNIRP's guidance. In this view, the ICNIRP Commission and Scientific Expert Group (SEG) members are asked to declare any personal interests in relation to the activities of ICNIRP.

The declaration of interests is to be completed at the time of acceptance of nomination for an election, updated after election, annually, and each time a change of personal interest occurs. The declarations of personal interests are requested from all:

- candidates to an ICNIRP position
- ICNIRP Commission members
- ICNIRP SEG members
- ICNIRP Scientific Secretary

Upon completion and signature, the declaration is to be sent electronically to the ICNIRP Secretariat at info@icnirp.org.

Declarations of all elected members of ICNIRP and its SEG will be posted on the ICNIRP website. All publications of ICNIRP shall contain an acknowledgement with regard to the online availability of the declaration of personal interests.

The declarations are evaluated by the Commission. If there is any conflict of interest, the Commission decides in accordance with the ICNIRP provisions entailed in the Charter and Statutes (see below), about the action required. The general principle of ICNIRP's approach is that neither the personal, nor the professional life, of its members should depend on NIR-relevant commercial entities or any other NIR interest groups. It is recognized that scientific expertise implies a wide range of professional and academic experiences and activities, called personal interests, which however do not per se automatically lead to a conflict. The evaluation of personal integrity is very complex and might be difficult to achieve to the satisfaction of all parties. It is the responsibility of the ICNIRP Board and Commission to carefully consider and decide if the declared interests potentially constitute a conflict of interest.

As per the ICNIRP Statutes, "no member of the Commission shall hold a position of employment that in the opinion of the Commission will compromise its scientific independence. (...) When a change occurs in a member's employment which, in the opinion of the Commission members, may compromise the Commission's scientific independence, the Commission shall decide whether this member can continue to serve". The Commission decision shall be taken by a simple majority vote, either by a formal letter ballot, at a special Commission meeting called for that purpose, or at its Annual General Meeting (ICNIRP Statutes, §6(2)).

Where an elected member's declaration of interest has been evaluated and ICNIRP has concluded that it does not represent a conflict of interest, the reasons for ICNIRP's determination are provided below.

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LAST NAME, First name: STUCK, Bruce **POSITION (SEG, Commissioner, Sc. Secretary, incl. nominee):** SEG

ACTIVITIES AND ASSETS relating to the years 2021-2024

Please report activities, relationships and assets below, including any current application or negotiation for future activities, relationships and assets, as well as anything else that could be perceived as potentially representing a conflict of interest in relation to the activities of ICNIRP. Please provide explanation for acronyms.

Since my retirement from the US Army Medical Research Program in 2012, I have been a part-time, paid and unpaid consultant conducting laser radiation hazards assessments, an unpaid consultant to optical radiation exposure guideline development activities (i.e. ANSI ASC Z136, ACGIH, ICNIRP’s SEGs, and an ISO Light Hazard Task Group) and reviewer of manuscripts for open literature publication. I maintained a home office with ‘high speed’ internet, automated literature search capabilities, and library privileges at a local university. (ANSI – American National Standards Institute; ASC Z136 – Accredited Standards Committee Z136, ACGIH – American Conference of Governmental and Industrial Hygienists; ICNIRP – International Commission on Non-Ionizing Radiation Protection, and ISO – International Standards Organization, SEG – Scientific Expert Group.)

EMPLOYMENT

Employer(s), function, title: After working 42 years for the US Army Medical Research Programs (USAMRP) in the non-ionizing radiation bioeffects to set consensus-driven permissible exposure limits, assessment of laser- induce eye injury, and ocular protection programs to prevent injury. I conducted, published, and directed research programs on the biological effects of optical radiation on the eye and skin and managed an Army group studying the biological effects of radio frequency radiation. For the period from 2012 to 2022, I have been a ‘part time’ consultant on non-ionizing radiation bioeffects, consultant to military groups on electromagnetic radiation health and safety issues. In 2021-2023, I have significantly reduced my consulting activities for health and family reasons but continued my interest in laser bioeffects and mechanisms as related to establishing exposure limits. Title: Optical Radiation Biophysicist. Address: 23106 Osprey Ridge, San Antonio, Texas, 78260, U.S.A.

Dates – Start/End-Ongoing: October 2012 (After retirement from USAMRP)/ Ongoing but limited scale from 2021-2024

UNPAID CONSULTANCY, ADVISORY POSITIONS AND SERVICES

These include unpaid consultancy and service as a scientific or other advisor for any commercial or non-commercial organization with an interest in NIR (including membership in scientific councils, associations, etc.) or as part of a regulatory, legislative or judicial process concerning NIR.

Name and description of the activity: Unpaid consultant and advisor: American National Standards Institute’s Accredited Standards Committee Z136 (ANSI ASC Z136) for the Safe Use of Lasers with the Laser Institute of America serving as the Secretariat of ASC Z136. I am a voting member of ANSI ASC Z136 General Committee and serve on the following Standards Sub Committees: SSC-1 on the Safe Use of Lasers, SSC-7 on the Testing and Labeling of Laser Protective Equipment. I serve on two (2) Technical Sub-Committee, TSC-1 on Laser Bioeffects and Medical Surveillance, and TSC-7 on Hazard Analysis and Applications. I am a member of the Laser Institute of America, the Association for Research in Vision and Ophthalmology, and the Biomedical Optical Society of the SPIE. I am completing my term on the American

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Conference of Governmental and Industrial Hygienists Physical Agent Committee (ACGIH PAC) where I assisted the review and annual update of Threshold Limit Values (TLVs) for non-ionizing radiation and other physical agents. All ACGIH activities were unpaid and required an appointment to serve. ACGIH did support reimbursement for travel expense albeit, due to the pandemic, all meetings since 2020 have been virtual ('Zoom') meetings. Served on the ICNIRP Commission from 2004-2016 and SEGs from 1999-2003 and 2017-2022.

Dates - Start/End-Ongoing: 2020 to present (ongoing as stated)

Name and status of the contractor: Bruce E Stuck serves as an unpaid consultant/advisor to the organizations cited above.

PAID CONSULTANCY, ADVISORY POSITIONS AND SERVICES

These include paid consultancy and service as a scientific or other advisor for any commercial or non-commercial organization with an interest in NIR (including membership in scientific councils, associations, etc.) or as part of a regulatory, legislative or judicial process concerning NIR.

Name and description of the activity: SG Associates (SG Assoc.), Del Ray Beach, Florida, U.S.A. SG Assoc. is a 'state of the art' development company that explores the use of laser radiation, ultrasound, or other physical stimuli to produce useful of physical stimuli on biological tissues for potential commercial application. Innovative applications of multi-wavelength lasers and directed ultrasound in detection, signalling, tracking, and imaging are explored. An advisory group of 'subject matter experts' advises SG Assoc. and directs assessment of proposed effects and hazards. Hazard assessments are required for a wide range of possible exposure conditions. Short, task-specific assessments are specified by SG Assoc. and the assessments are performed by independent consultants. Most requirements require potential exposure to people not exceed permissible exposure limits. Concepts for review are routinely proprietary to SG Assoc. Hence, consultants perform these assessments under a 'non-disclosure' agreement of the specifics of the application identified.

Dates – Start/End-Ongoing: March 2021-June 2023/Inactive as of October 2023 but possible tasks could be requested in 2024.

Name and status of the contractor: Bruce Stuck serves a consultant for SG Assoc. I have prepared mostly written (albeit a few verbal) hazard analysis reports or concept assessment reports.

Recipient of Income: Personal Income

Income (percentage of the above-mentioned unit's income): During the tax years 2021, 2022, and projected through 2023, < 0.68% of my retirement income was from consultant assessment tasks.

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Not applicable

RESEARCH SUPPORT RECEIVED FROM COMMERCIAL ENTITIES

These are research support, grants, collaborations, sponsorships, other funding and in-kind support valued at more than EUR 1000 overall (including equipment, facilities, staff, paid travel to meetings, etc.).

Name and description of the activity:

Dates – Start/End-Ongoing:

Name and status of the contractor:

Unit receiving and managing the income: [Select unit receiving income](#)

Income (percentage of the above mentioned unit's income):

Are you free to publish whatever results your research shows without the influence from the entity funding your research?

Yes Wording used in the contract:

No Please describe how your independence is safeguarded:

Not applicable

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INVESTMENTS AND COMMERCIAL INTERESTS

Investment and commercial interests mean investments in a commercial entity, in a trust or holding company. This includes any commercial business interests (e.g., proprietorships, partnerships, joint ventures) and indirect investments such as a trust or holding company, stocks, bonds, stock options, or other securities. Broadly diversified mutual funds, pension funds or similar investments that are broadly diversified and on which the member does not exercise control are excluded. Members shall declare any current, past or planned investments and commercial interests they hold in the NIR area, when such an interest is valued at more than EUR 1000.

Name of the investment/share:

Dates – Start/End-Ongoing:

Income (percentage of yearly personal income):

Not applicable

INTELLECTUAL PROPERTY

Intellectual property is patents, trademarks and copyrights (also pending applications) and proprietary know-how in a substance, technology or process.

Designation of the property:

Dates – Start/End-Ongoing:

Income (percentage of yearly personal income):

Not applicable

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ADDITIONAL INFORMATION*

This includes information concerning the interests of a person with whom the member has personal or professional ties (such as a family member or close colleague) when that person's interests (professional activities or financial engagements in the NIR area) may be impacted positively or negatively by the work of ICNIRP.

* Information provided here may be protected by privacy rights. ICNIRP will anonymize this field before DOI disclosure.

To your knowledge, would the outcome of your activities within ICNIRP benefit or adversely affect interests of others* with whom you have substantial common personal, financial or professional interests (such as family members or colleagues)?

Please provide a description of the others' interests that are potentially affected by your ICNIRP activities: The ICNIRP Guidelines on optical radiation are extremely important to the safe use of optical radiation and are recognized as such world-wide. Exposure guidelines must prevent injury but not be too restrictive as to inhibit the emergence of important applications. In establishing exposure guidelines, the ICNIRP process requires extensive review and consensus agreement by expert panels. The best available experimental data and computer models to understand the potential biological effects are examined. Hence, the opinion of one person is generally not sufficient to cause a guideline change. Neither I nor any member(s) of my family, nor our financial interests would be impacted negatively by ICNIRP's activities. The ICNIRP published Guidelines and Statements have been vetted by independent critique, review, and approval by the ICNIRP Commission with assistance from their SEGs. Most will benefit from ICNIRP's activities when human injury is precluded by the exposure guidelines and statements established by ICNIRP. This occurs when we benefit from application (e.g., medical procedures, medical assays, or perhaps 'safe' optical LIDAR assisted autonomous vehicles).

Dates – Start/End-Ongoing: 2021-2024

Not applicable

Is there any other aspect of your personal background or present circumstances not addressed above that might be perceived as affecting your objectivity or independence? I am not aware of an issue in my background or present circumstance that is or has been construed as a lack of objectivity. Although every scientist has a 'bias' on some issues, the consensus process gives one the opportunity to express their bias and either concur or non-concur. The ICNIRP deliberations have always been thorough and anchored with the science (e.g., biological data). Once again, the interactive, ICNIRP process is robust in providing many review and issue discussion opportunities. The process favours a consensus based on the best scientific solution but offers the opportunity for non-concurrence. As an older person, age may affect my objectivity in some matters, but I hope not and am always cautious to consider new ideas (after thorough review, of course) with consideration of my acquired knowledge over my professional career. The ICNIRP SEGs need to continue to invite young scientists (younger than me!) to assist in this process.

Please provide a description of the other aspects that are potentially affecting your objectivity or independence:

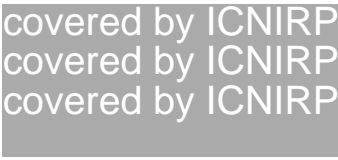
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Dates – Start/End-Ongoing: 2021-2024
Not applicable <input checked="" type="checkbox"/>

I hereby declare that the disclosed information is true and complete to the best of my knowledge. Should there be any change to the above information, I will promptly notify the ICNIRP Secretariat and complete a new declaration of interests which takes the changes into account.

I hereby provide my consent that my declaration of interest will be made available publicly via the ICNIRP website as per the condition stated under “policy”.

Date: October 25, 2023 Name: Bruce E. Stuck Signature: 

COMMENTS FROM ICNIRP ON THIS DECLARATION OF PERSONAL INTERESTS: AS THE INCOME GENERATED BY DR STUCK'S ADVISORY ACTIVITY REPRESENTS ONLY A SMALL PROPORTION OF THE PERSON'S INCOME, ICNIRP DOES NOT CONSIDER THAT THIS REPRESENTS A CONFLICT OF INTEREST. APPROVED.
