

## Institute for Optical Science Pattern of Administration

This document outlines the Pattern of Administration for the Institute for Optical Science (IOS). It is subject to ongoing updates and revisions, which may be implemented as needed. All updates, including periodic reaffirmations, require approval from the IOS Director. The current Pattern of Administration is detailed below.

**I. Name:** The organization's name is "Institute for Optical Science", and its acronym is "IOS".

**II. Purpose:** The purpose of the IOS is to foster an Ohio regional community of multidisciplinary researchers studying the fundamental properties of light and harnessing these properties in practical applications for significant benefit to society.

**III. Goals:** The IOS's goals are:

1. the creation of an Ohio regional community of multidisciplinary researchers in the optical sciences,
2. to coordinate on-campus and regional focus groups and centers that eliminate traditional academic boundaries at the research level, and
3. to nurture interdisciplinary optical science research and education.

The IOS accomplishes these goals through interdisciplinary workshops, seminars, schools, student engagement, and scholar programs within the Ohio State community and beyond. The goals also allow members to better capitalize on national interdisciplinary initiatives in the optical sciences.

Successful outcomes from these goals provide value to Ohio State in the following ways:

1. Financially: Increased external funding through IOS collaborative awards. The potential for collaboration with industry partners is increased through their involvement with the IOS. Successful joint research outcomes increase the potential for commercialization.
2. Reputationally: The existence of the IOS increases the visibility, and recognizes the importance, of the optical sciences at Ohio State. This is accomplished by IOS sponsored workshops, working groups, and events that increase the regional and national visibility of Ohio State. The IOS enhances the reputation of Ohio State by providing a social media presence that highlights its members and their accomplishments.
3. Academically: By highlighting the optical sciences, IOS helps attract prospective faculty, students, and researchers to work in this field at Ohio State. IOS supports student organizations in this topic area, such as the Optica Student Chapter, and provides mentorship opportunities outside of the classroom. IOS also fosters cross-disciplinary research experiences for students (i.e., Support for the Chemical Physics IGP) and helps them develop a professional network (i.e. The STEAM Factory Postdoc Exchange).

**IV. Authority:** The IOS exists under the auspices of the Ohio State Enterprise for Research, Innovation and Knowledge (ERIK) from which it receives financial, institutional oversight, and organizational support.

**V. Officers:** The IOS officers consist of:

1. **Director:** The term of the Director is five (5) years and is renewable. The Director's primary responsibility is to oversee the mission of the IOS and serve as the IOS's spokesperson. The Director:
  - a. is employed by Ohio State,

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- b. reports to and seeks guidance from ERIK and other stakeholders (such as colleges invested in the IOS),
  - c. seeks guidance and advice from the Executive and External Advisory Committees,
  - d. ensures the integrity of the administrative structure in a transparent manner,
  - e. implements the vision and goals of the organization, overseeing its operation and strategy to achieve those goals,
  - f. raises funds,
  - g. hires and manages staff, and
  - h. ensures compliance with Ohio State policies.
2. **Deputy Director:** The term of the Deputy Director is two (2) years and is renewable at the discretion of the Director. The Deputy Director's primary responsibility is to support the efforts and responsibilities of the Director. The Deputy Director:
- a. is employed by Ohio State,
  - b. will temporarily overtake functions of the Director if a conflict of interest exists in these functions, and
  - c. may represent the IOS at meetings if the Director is unable to attend.

At the end of an IOS officer's formal term, the officer can choose to accept an additional term or retire from the leadership position. If the officer chooses to retire, the officer is encouraged to assist in identifying their replacement. ERIK is ultimately responsible for approving the vacant Director position. The Director is responsible for approving a vacant Deputy Director position in consultation with the Executive Committee. IOS members will be notified of an officer's proposed replacement or continuation and will be given two (2) weeks to voice any serious concerns or objections. If no objections are expressed after the two-week notification period, the officer will be automatically approved.

**VI. Membership:** The IOS members will consist of individuals working in the optical sciences that desire collaboration and support from others in the optical community. Prospective members will supply a CV and a letter expressing interest and how their background matches the mission of the IOS. Membership approval will be determined by the Executive Committee after review of the supplied materials. Membership will be maintained indefinitely unless the member informs the Director, or their subordinate, in writing of the desire to discontinue membership, or the Director/Executive Committee initiates the discontinuation of membership at their discretion.

The responsibilities of members include participation and promotion of seminars, and the ability to talk at an IOS-hosted event that includes the broad audience of optical science.

Members will see benefits such as:

- bringing people together in the field of optics to solve problems that will benefit the university community at large,
- promotion of member ideas/initiatives and helping grow them into the potential for collaboration, and
- availability of visiting scholar travel and collaborative grant support.

**VII. Committees:** The IOS committees support the IOS officers and consist of:

1. **Executive Committee:** This committee consists of approximately six (6) members that are current IOS members. The term of a member is three (3) years. Membership terms alternate such that two members are rotated out every year or renewed. Executive committee members will be identified and recruited by the Director with the assistance of the Executive Committee members. The composition of the committee reflects the diverse interests of the optical community. This committee reports to, and supports, the Director as they advance the vision and long-term goals for the organization. Responsibilities include:
  - a. attending biannual Executive Committee meetings,
  - b. review of IOS strategy and progress,

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- c. review of new membership applicants
- d. evaluation of proposals for the Agostini/DiMauro Visiting Scholar Funds (Appendix A) and IOS Collaborative Grants (Appendix B).

The Executive Committee, at its discretion, may choose to write a report, evaluating the performance of the Director during the past year. This report is an internal document, intended solely for the use of the Director.

2. **External Advisory Committee:** This committee consists of three (3) committee members that are not affiliated with Ohio State. The term of a member is three (3) years. Membership terms are rotated each year such that one member, whose time of membership is the longest, is rotated off and a new committee member is added. The External Advisory Committee provides non-bias guidance to the Director as they advance the vision and long-term goals for the organization. Committee members will be identified and recruited by the Director.

**VIII. Funding Opportunities:** The IOS provides the following funding opportunities for IOS members:

1. Agostini/DiMauro Visiting Scholar Funds: Described in Appendix A.
2. IOS Collaborative Grants: Described in Appendix B.

**IX. Supported Education Programs:** The IOS provides support for the following programs:

1. Support of the Optica Student Chapter at Ohio State University.
2. Support of the Frontiers in Chemical Physics Course.
3. The Frontiers of Attosecond and Ultrafast X-ray Science School.

## Appendix A: Agostini/DiMauro Visiting Scholar Funds

Institute for Optical Science (IOS) members are eligible to apply for Agostini/DiMauro Visiting Scholar Funds (VSF) involving visits that initiate, advance, and disseminate collaborative interdisciplinary research. The VSF is made possible through a generous donation from Dr. Sailesh Chittipeddi, who received his Ph.D. in Physics from Ohio State working with Prof. Arthur Epstein. This funding vehicle is inspired by the historical collaboration of Ohio State faculty Prof. Pierre Agostini and Prof. Louis DiMauro, both members of the Institute for Optical Science. Their years of collaboration resulted in many groundbreaking discoveries in the optical sciences and were epitomized by the 2023 Nobel Prize in Physics for the discovery of attosecond light pulses by Prof. Agostini.

Proposals are welcome and encouraged that have the potential to benefit and advance the field of optical sciences.

Uses of funds can include, but are not limited to, travel expenses for:

- a visiting scholar sponsored by an IOS member, or
- an IOS member to collaborate with another scholar.

Requests for funds may include:

- up to \$6K for direct costs.

### REQUIREMENTS

To be eligible for funds, an IOS member must submit a proposal that:

- funds interaction with another scholar,
- contributes to developing, scaling, or advancing research that is innovative and interdisciplinary, and benefits the field of optical sciences, and
- provides an itemized estimate of necessary funds and justification for their use.

Preference will be given to proposals from IOS members that have not previously been awarded funds in the same calendar year.

### TERMS

The terms of the award are:

- awarded funds must be spent within 12 months of allocation.
- unspent funds are returned to IOS at the conclusion of the period of performance. No-cost extensions can be requested via email before the end of the period.
- funds may not be used for overhead, capital expenditures or salary. All university and unit policies for use must be followed.
- Visiting Scholar Funds recipients agree to:
  - provide a description of outcomes (<1 page) within 30 days of project completion. Failure to submit a final report can result in disqualification from future IOS funding opportunities.
  - acknowledge IOS support in conference/workshop presentations and published work resulting from the visit.
  - present one seminar online or in-person about their work to share it with the broader community of optical science hosted by IOS.

### DEADLINE AND REVIEW PROCESS

Applications will be periodically announced via email messages to IOS members and posted on the IOS website. Proposals will be accepted on a continuous basis. There is no deadline for proposals. Applications are reviewed by the IOS Executive Committee as they are received and awarded for as long as IOS's budget permits. The goal time for review and notification is 60 days after submission.

### APPLICATION REQUIREMENTS

The IOS Executive Committee will review and score proposals based on the following criteria, which applicants are strongly encouraged to describe:

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- Purpose and Impact: The intended purpose of the proposed visit is clearly stated and valuable to the optical science community.
- Anticipated Outcomes: The proposed outcomes are reasonable, justified, and worthwhile.
- Vision for Next Steps (if applicable): The proposal includes feasible and clear next steps for leveraging outcomes of the proposed visit.
- Timeline and Budget/Resource Request:
  - The proposed visit can be completed within one year.
  - The budget requested is within Visiting Scholar Funds parameters and reasonable for the activities described.

## Appendix B: IOS Collaborative Grants

Institute for Optical Science (IOS) members are eligible to apply for IOS Collaborative Grants (CG) that foster meaningful collaboration between IOS members and other researchers. This funding vehicle is made possible with support from Ohio State's Enterprise for Research, Innovation and Knowledge (ERIK). It is intended to bring fellow researchers together while increasing the visibility of IOS.

Proposals for collaboration support are welcome and encouraged that have the potential to benefit and advance the field of optical sciences.

Uses of IOS funds and administrative support for collaboration can include, but is not limited to:

- organizing a workshop, or
- proposal development.

Requests for funds may include:

- up to \$6K for direct costs.

### REQUIREMENTS

To be eligible for funds, an IOS member must submit a proposal that:

- funds interaction with another researcher,
- contributes to developing, scaling, or advancing research that is innovative and interdisciplinary, and benefits the field of optical sciences, and
- provides an itemized estimate of necessary support resources and justification for their use.

Preference will be given to proposals from IOS members that have not previously been awarded funds in the same calendar year.

### TERMS

The terms of the award are:

- awarded funds must be spent within 12 months of allocation.
- unspent funds are returned to IOS at the conclusion of the period of performance. No-cost extensions can be requested via email before the end of the period.
- funds may not be used for overhead, capital expenditures or salary. All university and unit policies for use must be followed.
- collaborative grants recipients agree to:
  - provide a description of outcomes (<1 page) within 30 days of collaboration support completion. Failure to submit a final report can result in disqualification from future IOS funding opportunities.
  - acknowledge IOS support in all conference/workshop presentations and published work.
  - present one seminar online or in-person about their work to share it with the broader community of optical science hosted by IOS.

### DEADLINE AND REVIEW PROCESS

Applications will be periodically announced via email messages to IOS members and posted on the IOS website. Proposals will be accepted on a continuous basis and reviewed by the IOS Executive Committee as they are received and awarded for as long as IOS's budget permits. The goal time for review and notification is 60 days after submission.

### APPLICATION REQUIREMENTS

The IOS Executive Committee will review and score proposals based on the following criteria, which applicants are strongly encouraged to describe:

- Purpose and Impact: The intended purpose of the proposed collaboration support is clearly stated and valuable to the optical science community.
- Anticipated Outcomes: The proposed outcomes are reasonable, justified, and worthwhile.

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- Vision for Next Steps (if applicable): The proposal includes feasible and clear next steps for leveraging outcomes of the proposed collaboration support.
- Timeline and Budget/Resource Request:
  - The proposed collaboration support can be completed within one year.
  - The budget requested is within collaborative grants parameters and reasonable for the activities described.