

Division of Training &
Workforce
Development

National Institute of
General Medical
Sciences

October 21, 2024

NIGMS Tribal Undergraduate to Graduate Research Training and Leadership Experiences (TURTLE) Program

2024 Applicant Webinar

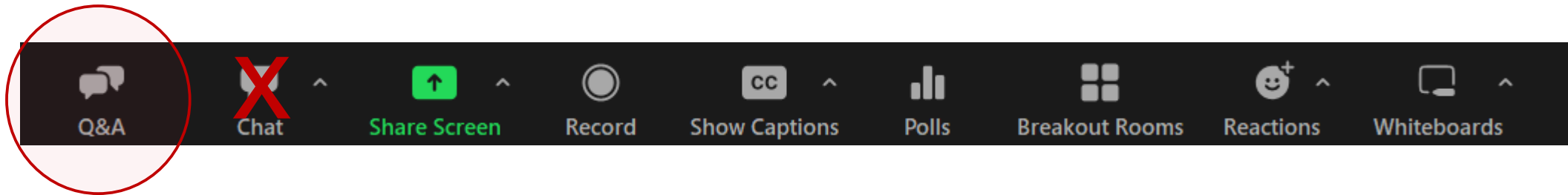
TURTLE Program Officer: Kalynda Gonzales Stokes

Grants Management: Robert Altieri

Review: Latarsha Carithers

Webinar Information

- This **webinar is being recorded** and will be available online.
- The **slides will be posted on the TURTLE webpage** (video will be posted in the coming weeks).
- Please **type your questions in the Q&A box** throughout the webinar.



- If time permits, there will be an open Q&A period at the end of the webinar.

Webinar Participants: NIGMS Program Staff

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Webinar Agenda

- TURTLE Background, Structure, & Eligibility
- Peer Review
- Budget Overview
- Questions

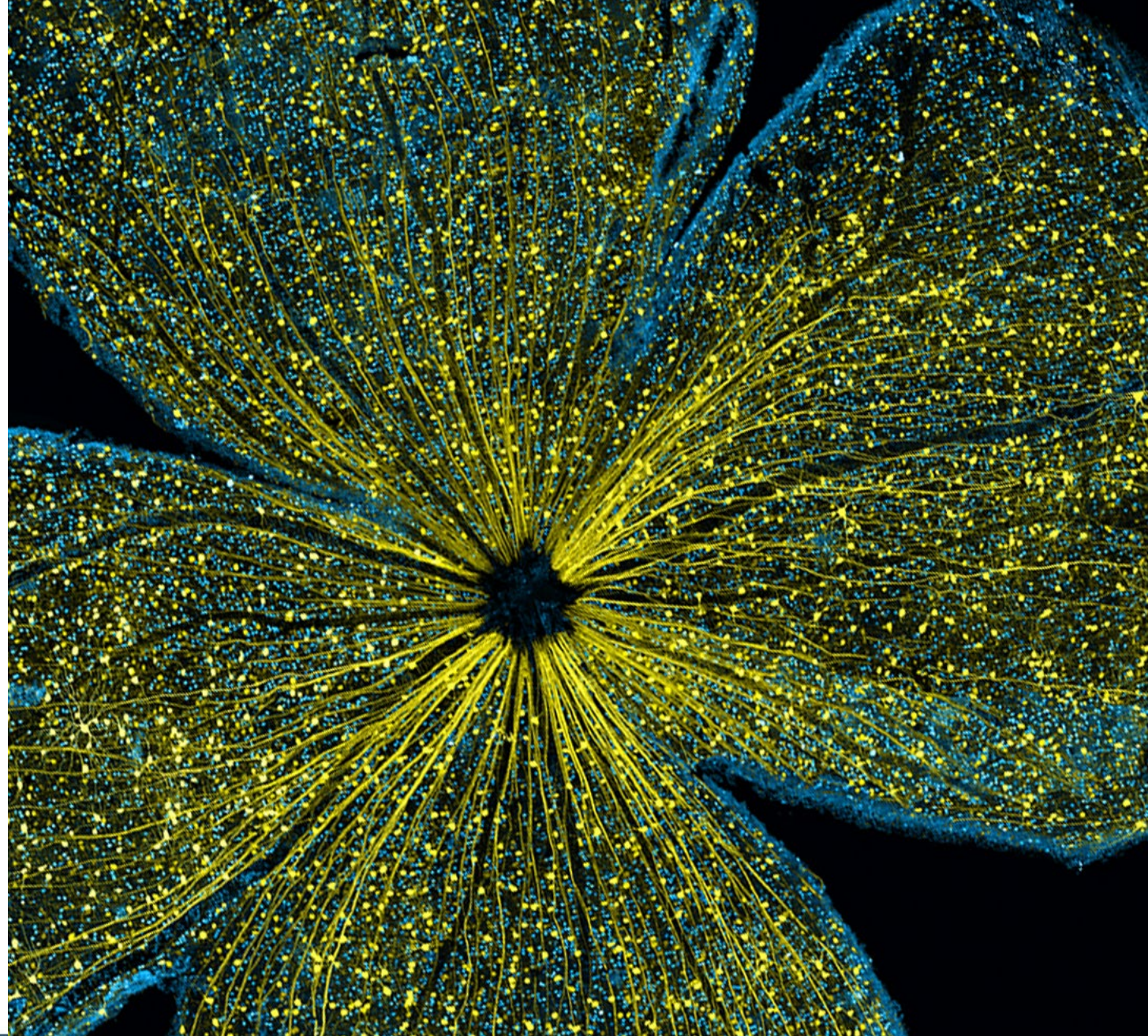
Coming soon to the TURTLE web page – video and slides:
Guide for Preparing A TURTLE Application

Disclaimer

This presentation and accompanying slides are for informational purposes only. They serve as an overview of the NIH TURTLE program and are not meant to be comprehensive in coverage of all required components an application.

Applicants are responsible for following the instructions detailed in the Notice of Funding Opportunity (NOFO), any Related Notices (included in the NOFOs Overview Information section), and the [SF424 Application Guide](#).

TURTLE Program Background, Structure & Eligibility



Tribal Evaluation of the NIGMS Native American Research Centers for Health (NARCH) Program

Recommendation: Training Grants for Tribes/Tribal Organizations

- Provide financial support and tuition for students selected by Tribes/Tribal Organizations to obtain degrees in biomedically-related fields at two levels:
 - Undergraduate
 - Graduate
- Goal: to develop future scientists interested in AI/AN health research
- Each grant could support students from multiple Tribes

Tribal Undergraduate to Graduate Research Training and Leadership Experiences (TURTLE)

Phased awards to allow Tribes and Tribal Organizations to develop and then implement institutional training grants for undergraduate and graduate students pursuing biomedical degrees:

1. **Undergraduate training NOFO: UE5/T34 ([PAR-24-236](#))**
2. **Graduate training NOFO: UE5/T32 ([PAR-24-235](#))**

***NOFO: Notice of Funding Opportunity**

TURTLE Program Goals

- The development of a pool of scientists who:
 - Have the skills to conduct AI/AN health and health equity research in a culturally appropriate, ethically responsible and rigorous manner.
 - Earn biomedical bachelor's or PhD degrees and have the technical, operational, and professional skills to pursue careers in AI/AN health research.



Methods
&
Technology

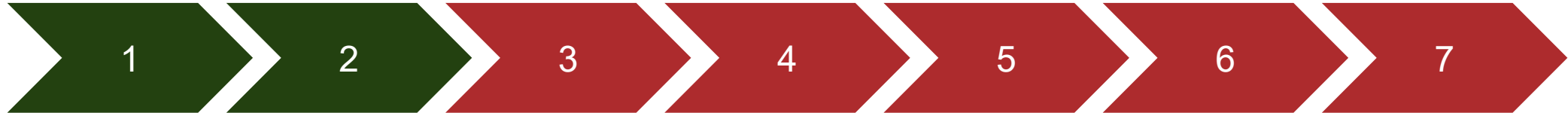
Quantitative
&
Computational

Acquiring Information,
Experimental Design
&
Data Interpretation

Management
&
Leadership

Communication
&
Teamwork

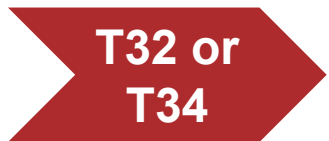
Phased Program to Build Research Capacity



- 7- year phased award:
 - **UE5** = first two years of the award
 - **T32 or T34** = last five years of the award



- **Capacity building** – to allow awarded Tribal Entities to hire personnel, develop programming and establish partnerships



- **Training** – to recruit and appoint students; provide stipends and tuition remission; provide training, mentoring, and networking activities; strengthen partnerships

Phased Program Details

- The **first phase (UE5)** is a cooperative agreement, where an NIH Project Coordinator will work closely with the Tribal Entities to support the development phase (refer to Section VI of the Funding Opportunity for details).
- The conversion from the first phase (UE5) to the **second phase (T34 or T32)** will occur after an NIH administrative review of the progress achieved during the first phase and the entity's preparedness for the training grant phase (T34 or T32) of the award.

UE5 Transition to T34 or T32

Progress will be assessed based on:

- **Adequate program personnel** with the appropriate expertise. This may require hiring or training of staff during the development phase.
- Ability to recruit a **pool of potential trainees** in alignment with the goals of the TURTLE program.
- **Plans for research training, career development, and networking activities** as well as the personnel and technologies to deliver these activities.
- **Mentor and role model** recruitment, training, and monitoring procedures.
- The **infrastructure to administer the grant** and the trainee stipends, tuition remission and training-related expenses.
- The capacity to **track and report** on trainee progress and outcomes.

UE5 –Potential Activities to Develop

- Recruit and Support Students at Various Institutions
- Provide Research Skills Development Activities
- Emphasize Career Awareness and Preparedness
- Promote Cohort Building
- Provide Additional Support and Oversight
- Facilitate Family Understanding and Engagement
- Offer Mentoring and Networking Opportunities
- Provide Information to Increase Cultural Awareness and Student Engagement at Institutions



Ruth L. Kirschstein National Research Service Award (NRSA) Training Awards: T34 & T32

- The phased award described in this NOFO is intended to develop capacity at eligible Tribal Entities and provide funds for institutional NRSA training programs.
- As with all NRSA grants, funding in the second (T34 or T32) phase will provide:
 - Five years of support for the research training of undergraduate trainees (**T34**) to identify and appoint trainees to the grant; dispense stipends, tuition remission payments and training-related expenses; provide training, mentoring and networking activities; track trainee progress; and report outcomes.
 - Five years of support for the research training of predoctoral trainees (**T32**) to identify and appoint trainees to the grant; dispense stipends, tuition remission payments and training-related expenses; provide training, mentoring and networking activities; track trainee progress; and report outcomes.
- Trainees are expected to be supported by the grant for 1-4 years of their training to receive the full benefits of the training program.

Role of the Program Director (PD) Principal Investigator (PI)

The PD(s)/PI(s) will have the primary responsibility for:

- Adhering to the overall objective of the TURTLE program.
- Developing capacity to administer a National Research Service Award (NRSA) Training grant.
- Developing programmatic activities.
- Contributing to the cooperative nature of the TURTLE program.
- Recipients will retain custody of and have primary rights to the data and software developed under these awards, subject to Government rights of access consistent with current DHHS, PH S, and NIH policies.

Several Program Models Are Possible Through TURTLE

- Grantee will administer the award, including paying stipends, tuition remission and benefits
- Grantee will provide additional mentoring, career development and support to the trainees beyond what they received from research advisors and professors
- Example TURTLE program models:
 - Grantee could be a TCU (or multiple TCUs) that provides support for its students and/or students at other institutions (for example, those transferring from a 2-year TCU to a 4-year school)
 - Grantee could be a Tribe or non-TCU Tribal Entity that supports students at multiple academic institutions

Organization Eligibility Information

Eligible Organizations

- The applicant organization must meet one of the following criteria:
 - A federally recognized AI/AN Tribe, as defined under 25 U.S.C. 1603(14); or
 - A tribal college or university, a tribal health program, or a tribal organization, as defined under 25 U.S.C. 1603 (24), (25), and (26), respectively including Tribal colleges or health boards meeting this definition; or
 - A consortium of two or more of those tribal entities Tribes or Tribal organizations.
- Collectively, referred to as eligible AI/AN “Tribal entities”

Foreign Institutions

- Specifically, an application may include foreign components **only if** one or more AI/AN tribes with ancestral catchment areas crossing the U.S. border will participate in the proposed program.

Program Director/Principal Investigator Eligibility Information

Program Director/Principal Investigator (PD/PI)

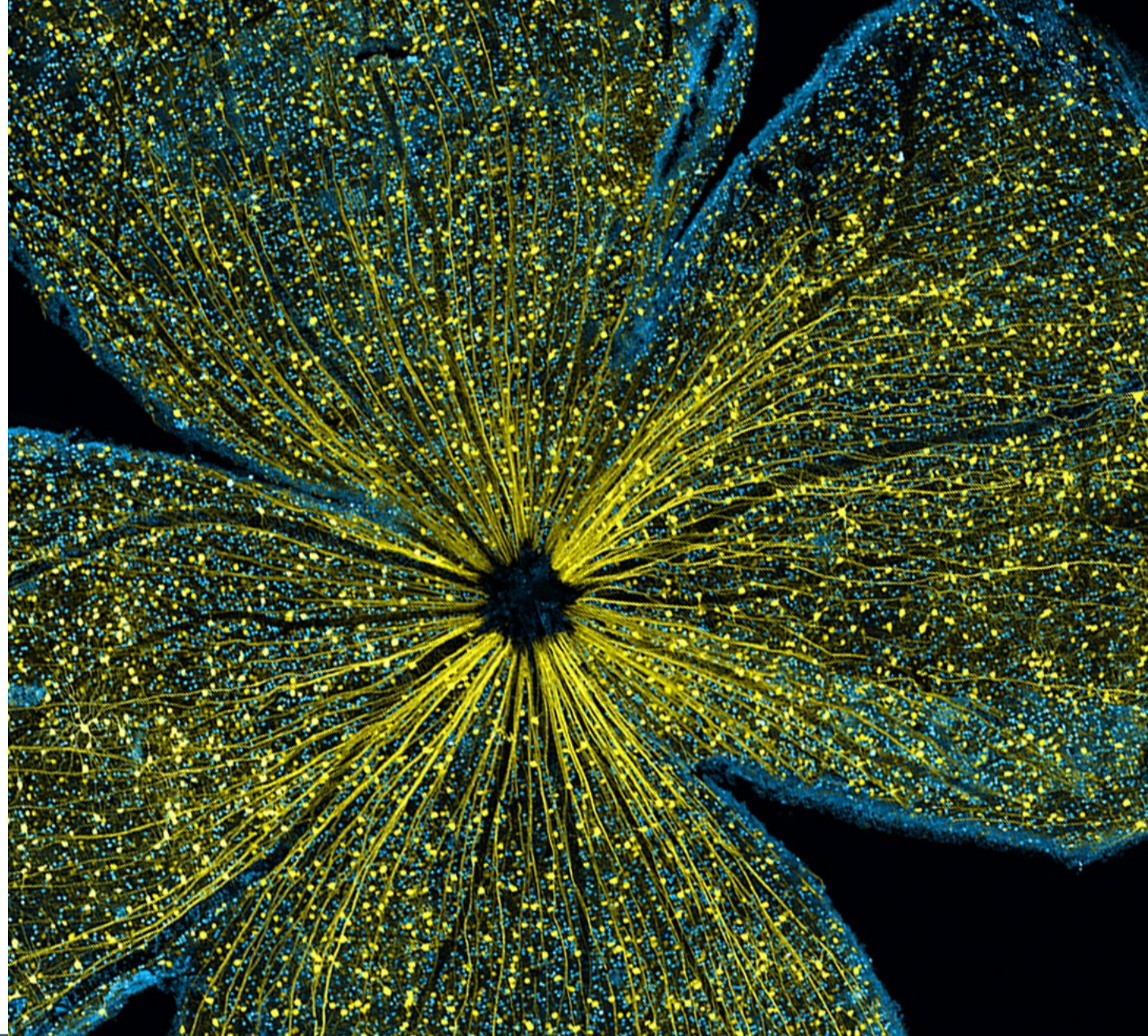
- Any individual(s) with the skills, knowledge, and resources necessary to carry out the proposed research
- Individuals from diverse backgrounds, including individuals from underrepresented racial and ethnic groups, individuals with disabilities, and women are always encouraged to apply for NIH support ([NOT-OD-22-019](#))
- **Do not need to hold a higher degree in the biomedical sciences**; however, it is expected that the PD(s)/PI(s) will consult with individuals with biomedical research experience regarding effective practices for training future research scientists
- **Can be employed at eligible Tribal Entities** through special employment arrangements, such as interorganizational personnel agreements among federally recognized AI/AN Tribes

Organizational Partnerships

- Partnerships with non-federally recognized Tribes are welcome and could help to address the programmatic goal of reaching individuals across a broad range of Tribes
- Partnerships with universities or educational organizations that have established Tribal Offices or an official Tribal Contact
 - If the potential partnership organization does not have an existing Tribal Office or Tribal Contact, they can discuss with the Tribal Entity what they would like this partnership to look like
- Recommend application assistance from the Office of Sponsored Programs of Partnership Organizations, if deemed helpful by the Tribal Entity

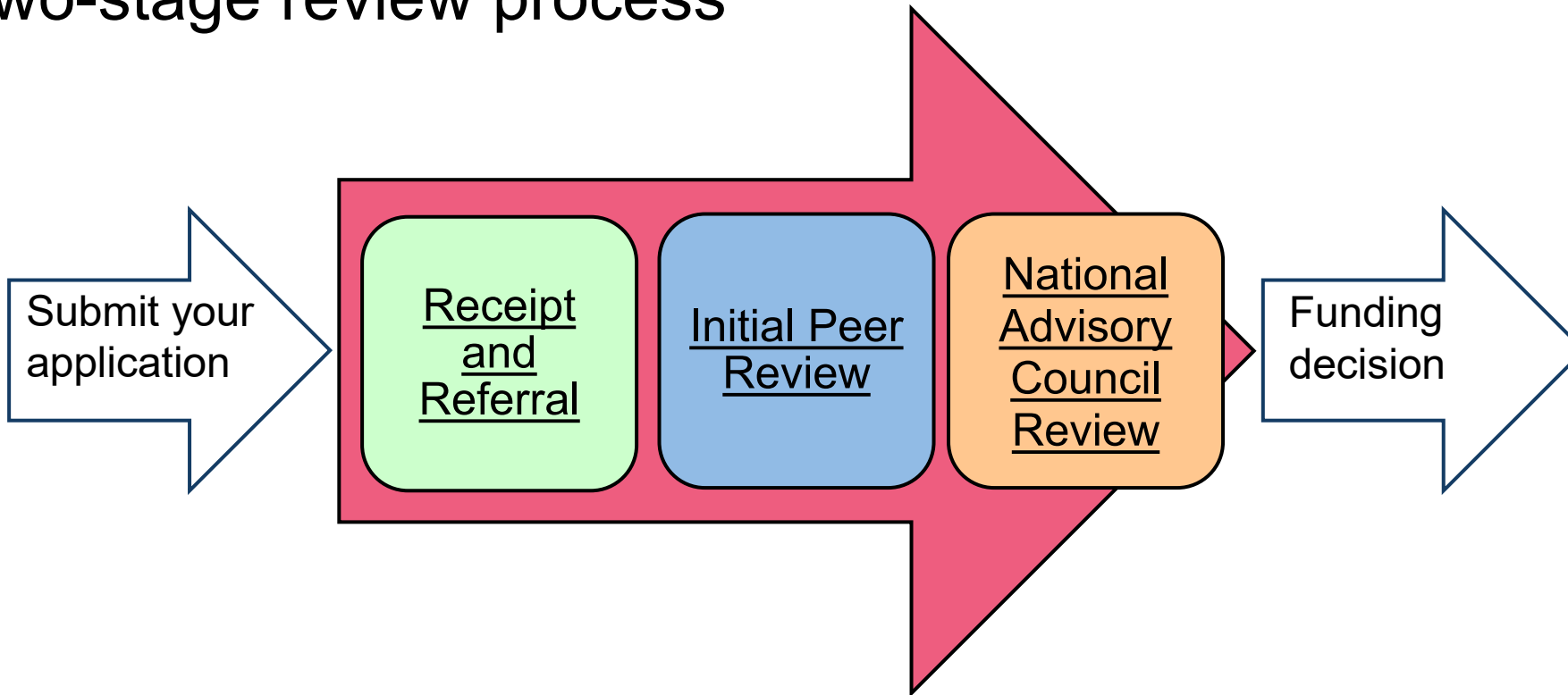
Review Considerations

Latarsha Carithers
Scientific Review
Officer



NIH Review Process

- Cornerstone of NIH extramural research
- Two-stage review process



Review Criteria for TURTLE

Overall Impact

5 Scored Review Criteria

- Importance & Rationale for the Training Program
- Program Staff, Mentors, and Other Contributors
- Development of the Training Program
- Training Program Plan
- Environment

Additional Review Considerations

Does not factor into the Overall Impact

- Budget

Application Preparation Tips

Read

- Read the NOFO and SF424 Application Guide to make sure you understand the requirements
- Read the review criteria in Section V of the NOFO to know how your application will be assessed

Check Application

- Allow enough time to carefully check application after submission. We cannot accept any missing items after the receipt deadline. **(Major noncompliance issue that can lead to withdrawal)**
- Successful submission through Grants.gov and eRA Commons does not mean appropriate responsiveness to and compliance with the program announcement.

Application Preparation, Cont.

Page Limits

- Supply all requested materials within page limits.
- Do not “overstuff” sections that don’t have page limits or use appendices to get around the limits. (Major noncompliance issue that can lead to withdrawal)

Appendices

- Only limited Appendix materials are allowed. Follow the instructions for the Appendix as described in the SF424 (R&R) Application Guide. (Major noncompliance issue that can lead to withdrawal)

Application Preparation, Cont.

Comprehensive

- Address all requirements of the program announcement.
 - If you have not fully formed a plan to collect trainee outcome data, at least acknowledge that you are working on it.
- Describe how your program “will work” within your institutional framework and be realistic in your program’s goals.
 - How will students be recruited and selected?
 - By whom?
 - What will the advisory committee do, if you have one?
 - How often will they meet?
 - How will you evaluate your program and use the evaluation to improve your program?

Application Preparation Tips, cont.

Current, relevant, and consistent:

- Make sure key personnel biosketches are up-to-date, in correct format, and relevant for training program (including statement of commitment to training).
- Make sure that all information is consistent throughout the application.

Common Pitfalls

MISSING REQUIRED ITEMS AND OVERSTUFFING

Review Process: Usual Timeline

Timeframe

(From submission date)

1 - 2 months

2 - 6 months

6 - 7 months

7 - 8 months

8 - 9 months

9 - 10 months

Activity

Referral

Review Panel

Summary Statement Available

Advisory Council

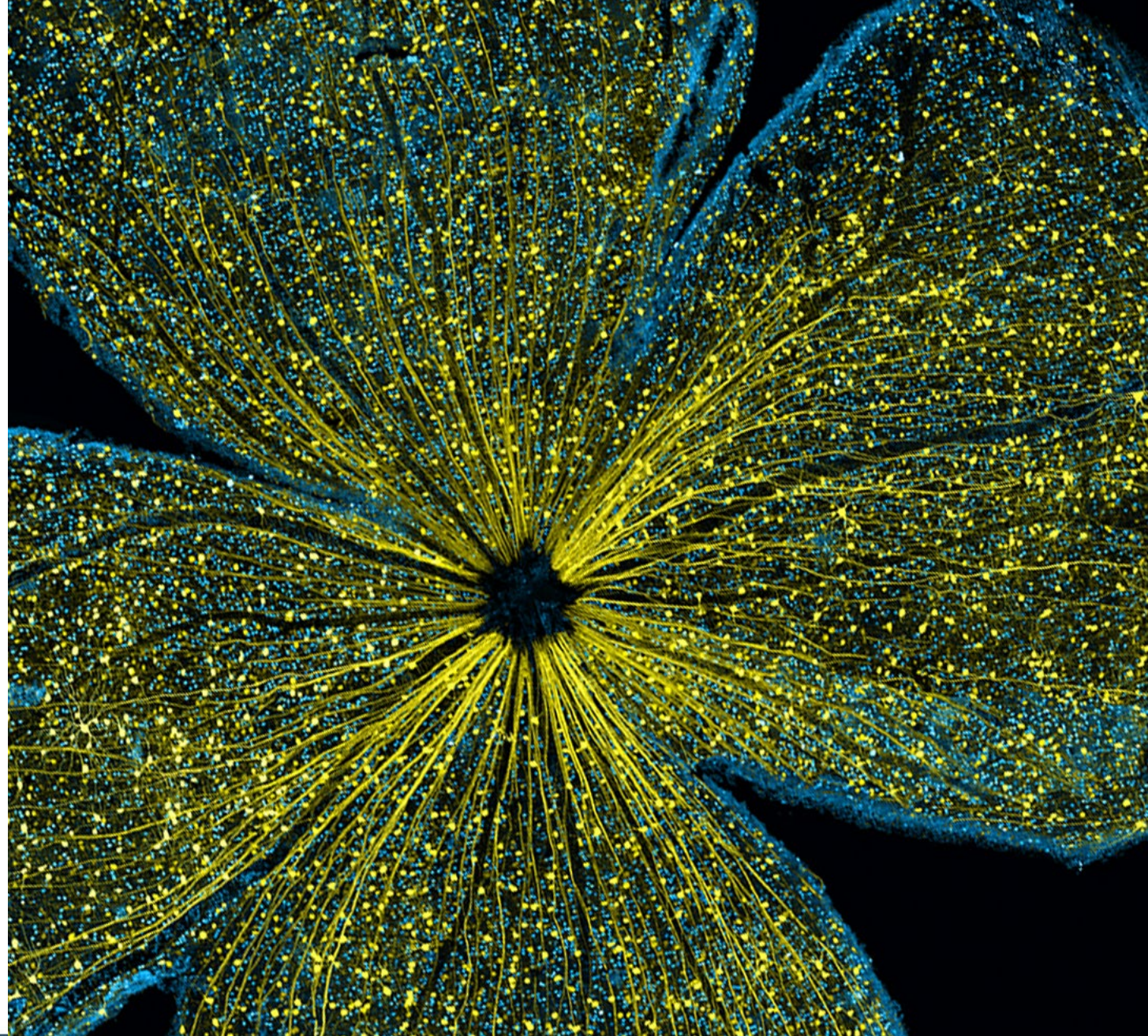
Funding Decisions

Award Start Date

Post review- reach out to your PO for next steps

Grants Management - Budget

Robert Altieri
Deputy Grants
Management Officer



Budget: Overview

- No budget limit, but request must reflect actual needs of proposed project.
- Application budget uses the SF424 R&R Budget Form and reflects two (2) phases:
 - **Development Phase (UE5):** Two years. Personnel costs (Program and Administrative) and Other Program-related Expenses such as travel, consultant costs, and administrative infrastructure development.
 - **Training Phase (T32/T34):** Five years and dependent on successful completion of the development phase. Application budget for this phase should be an estimate based on the number of trainees anticipated to be supported each year.



Budget: Development Phase (UE5) – Personnel Costs

- **Personnel Costs**: For program and administrative staff to focus on development of the educational content, recruitment, training and oversight procedures, institutional relationships and administrative systems for the training phase of the award.
 - Salaries requested may not exceed the levels commensurate with the organization's policy for similar positions and may not exceed the [NIH Salary Cap](#).
 - Typically, salary support for program staff should not exceed 1.5 FTEs depending on the size and scope of the program.
 - Effort levels requested must reflect **actual** time spent on the project regardless of funding source.
 - Effort levels should be stated in either calendar months or academic/summer months, but not both.
 - **Only PD/PIs should be listed in Section A.** All other personnel should be listed in Section B.



UE5 Budget: Other Personnel (Section B)

B. Other Personnel

PROGRAM AND ADMINISTRATIVE PERSONNEL THAT ARE NOT PD/PIs SHOULD BE LISTED IN SECTION B.

Number of Personnel	Project Role	Months			Requested Salary (\$)	Fringe Benefits (\$)	Funds Requested (\$)
		Cal.	Acad.	Sum.			
	Post Doctoral Associates						
	Graduate Students						
	Undergraduate Students						
1	Secretarial/Clerical	2.00			6,667.00	2,200.00	8,867.00
1	Program Coordinator	6.00			25,000.00	8,250.00	33,250.00
1	Curriculum Coordinator	4.00			26,667.00	8,800.00	35,467.00

IMPORTANT: TOTAL EFFORT FOR ALL PERSONNEL IN SECTIONS A & B SHOULD TYPICALLY NOT EXCEED 1.5 FULL-TIME EQUIVALENTS.



Budget: Development Phase (UE5)

- Other Program-Related Expenses: Expected to consist primarily of travel (Section D) along with consultant and administrative infrastructure development costs (Section F).

D. Travel ←

	Funds Requested (\$)
1. Domestic Travel Costs (Incl. Canada, Mexico and U.S. Possessions)	<input type="text"/>
2. Foreign Travel Costs	<input type="text"/>
Total Travel Cost	<input type="text"/>

F. Other Direct Costs ←

	Funds Requested (\$)
1. Materials and Supplies	<input type="text"/>
2. Publication Costs	<input type="text"/>
3. Consultant Services	<input type="text"/>
4. ADP/Computer Services	<input type="text"/>
5. Subawards/Consortium/Contractual Costs	<input type="text"/>
6. Equipment or Facility Rental/User Fees	<input type="text"/>
7. Alterations and Renovations	<input type="text"/>
8. <input type="text"/>	<input type="text"/>

QUESTION: What are “Administrative Infrastructure Development” costs?

- **ANSWER:** “Administrative Infrastructure Development” costs are not an NIH-defined term. They are meant to refer to any allowable costs necessary for a recipient to successfully complete the Development Phase (UE5) and be able to adequately support a training program to enable transition to the Training Phase (T32/T34). We expect that the actual makeup of these costs will be highly variable across applications due to the differing needs of each applicant institution.



Budget: Training Phase (T32/T34)

- All costs for the training phase budget estimate should be included in Section E. Participant/Trainee Support Costs.
 - **Line 1 (Tuition/Fees/Health Insurance):** Use the NRSA tuition cap (currently \$16,000/trainee) as the basis for this estimate. NOTE: Health Insurance costs are not included in this line item, but are instead under TRE.
 - **Line 2 (Stipends):** Use the current NRSA stipend levels as the basis of this estimate (predoctoral levels for T32 and undergraduate levels for T34).
 - **Line 3 (Travel):** Include up to \$1,000/trainee for trainee travel.
 - **Line 4 (Subsistence):** Leave Blank.
 - **Line 5 (Other):** This line item is where Training Related Expenses (TRE) should be listed. Include up to \$20,000/trainee including trainee health insurance costs.
 - **Number of Participants/Trainees:** Do not forget to enter the estimated number of trainees in this box. The expected number of supported trainees at the steady-state level for each TURTLE program is on average 10 per year. For example, if trainees are to be supported for 2 years each the program will appoint 5 new students each year.



Budget: Training Phase (T32/T34) Example

E. Participant/Trainee Support Costs

		Funds Requested (\$)
1.	Tuition/Fees/Health Insurance	160,000.00
2.	Stipends	143,400.00
3.	Travel	10,000.00
4.	Subsistence	
5.	Other <input type="text" value="Training Related Expenses"/>	200,000.00
<input type="text" value="10"/>	Number of Participants/Trainees	Total Participant/Trainee Support Costs
		513,400.00

Use NRSA cap (\$16,000/trainee) for tuition estimate

Use current NRSA stipend levels (T34 = undergrad; T32 = predoc)

Request up to \$1,000/trainee for travel

Request up to \$20,000/trainee for TRE

Enter estimated number of trainees here.

Budget Justification (Guiding Principles)

- The Budget Justification is uploaded as a PDF attachment to Section L and should provide additional information about each of the requested budget categories in Sections A-F.

L. Budget Justification

(Only attach one file.)

Add Attachment

Delete Attachment

View Attachment

- Organize the Budget Justification according to the two separate phases with the UE5 justification listed first, followed by the T32/T34 justification.
- Provide an explanation if any budget category deviates substantially (i.e. increases/decreases) from the initial budget period in future years.

Budget Justification (UE5): Personnel, Equipment, Travel

- **PERSONNEL:** List each personnel in Sections A and B along with their title, effort level, and role on the project. Be detailed enough in describing each person's role so that NIGMS staff can determine whether the requested effort is reasonable relative to what the person's roles and responsibilities will be. If an individual's effort level is funded from other sources (in part or in whole), provide an explanation.
- **EQUIPMENT:** Each piece of [equipment](#) requested must be listed separately to include their acquisition cost and justification. If quotes are available, append them to the budget justification.
- **TRAVEL:** Include the cost, purpose, destination, number of people traveling and dates (or duration) for each trip. Clearly state how the travel is directly related to the program.



Budget Justification (UE5): Other Direct Costs

- **OTHER DIRECT COSTS:** Itemize based on budget category and provide a brief justification for each along with the following item-specific details:
 - **Materials/Supplies:** Provide general categories of materials/supplies (e.g. glassware, chemicals, animal costs, etc.) and include an amount for each category.
 - **Consultant Services:** For each consultant, provide their name, organizational affiliation, the services he/she will perform, total number of days, travel costs, and the total estimated costs. NOTE: Consultants are not subject to the [NIH Salary Cap](#); however, any consultant charges should meet your institution's definition of "reasonableness".
 - **ADP/Computer Services:** List the total funds requested for each computer/IT service along with a justification for their need on the project. If the service is based on a specific rate, provide the amount and basis for the rate (e.g. \$250/FTE, \$500/month, etc.).



Budget Justification (UE5): Miscellaneous

- **Equipment or Facility Rental/User Fees:** List the total funds requested for each rental/user fee and the time basis for each fee (e.g. \$75/hour, \$500/month, etc.) along with a justification for their need on the project.
- **Subawards/Consortium/Contractual Costs:** List the total funds (direct + indirect costs) requested for:
 1. Each subaward/consortium organization(s) proposed for the project. NOTE: Separate budgets and justifications for each subaward must be appended to the application budget using the R&R Subaward Budget Attachment.
 2. Any other contractual costs proposed for the project. Contractual costs for services should be broken down by each service along with a justification for their need on the project.
- **Alterations and Renovations:** Itemize costs by category (e.g. repairs, painting, insulation removal/installation, etc.) and provide a justification for their need on the project. Where applicable, provide the costs per square footage for each category.
- **Indirect Costs:** Provide a breakdown of any exclusions applied to the F&A base calculation.

Budget Justification (T32/T34)

- **STIPENDS:** Provide the total amount and breakdown of calculation.
- **TUITION/FEES:** Provide the total amount and breakdown of calculation. Tuition costs should be based on actual tuition costs (i.e. do not apply the NIH 60% pro-ration). If there is a mix of both in-state and out-of-state tuition, please explain.
- **TRAVEL:** Provide the total amount and breakdown of trainee travel costs.
- **TRAINEE-RELATED EXPENSES (TRE):** Provide a breakdown and justification for each category of TRE. Typically, TRE consists of staff salaries, consultant costs, equipment, research supplies, faculty/staff travel directly related to the research training program, and trainee health insurance costs.



Budget References

- SF424 (R) Application Instructions:

<https://grants.nih.gov/grants/how-to-apply-application-guide/forms-h/research-forms-h.pdf>

- NIH Grants & Funding, “Develop Your Budget” Page:

<https://grants.nih.gov/grants/how-to-apply-application-guide/format-and-write/develop-your-budget.htm>

- 45 C.F.R. Part 75, Subpart E, “Cost Principles”:

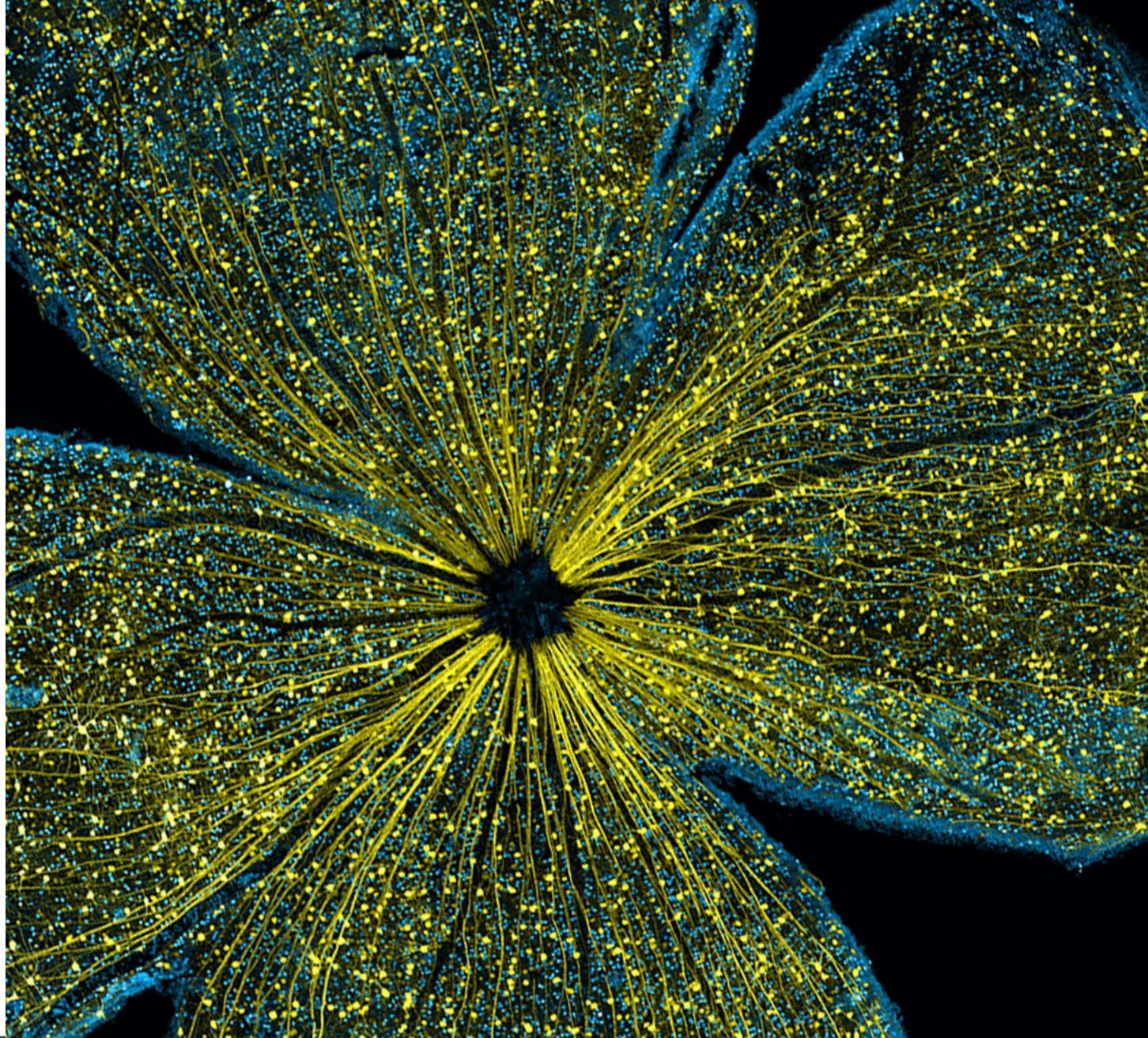
<https://www.ecfr.gov/current/title-45/subtitle-A/subchapter-A/part-75#subpart-E>

- NIH Grants Policy Statement, Section 7.9.1, “Selected Items of Cost”:

https://grants.nih.gov/grants/policy/nihgps/HTML5/section_7/7.9_allowability_of_costs_activities.htm#Selected



Final Thoughts



Next Steps for TURTLE & Resources

- Informational video on the Grants Process
- Office Hours with Program and Grants Management staff
- Please see our webpage for more information:
<https://www.nigms.nih.gov/training/Pages/turtle.aspx>
- Subscribe to the NIGMS Feedback Loop blog for updates:
<https://loop.nigms.nih.gov/2024/09/new-tribal-undergraduate-to-graduate-research-training-and-leadership-experiences-turtle-program-and-upcoming-webinar/>

NIH & NIGMS TURTLE Points of Contact

- **TURTLE Email:** NIGMSTurtle@nigms.nih.gov
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- **Scientific Review:** Latarsha Carithers - latarsha.carithers@nih.gov
- **Grants & Budget Management:** Robert Altieri - robert.altieri@nih.gov
- **NIH Tribal Health Research Office (THRO):** <https://dpcpsi.nih.gov/thro>

Questions?

Thank you for joining!
Best wishes on your application!

