

Division of Training &
Workforce
Development

National Institute of
General Medical
Sciences

November 25, 2025

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

TURTLE Program Officers:

Kalynda Gonzales Stokes, PhD

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Additional Information

- Open Office Hours with Program Officers will be available on **Friday, December 5, 2025 from 1-2 pm.**
- **Frequently Asked Questions (FAQs)** will be posted on the TURTLE webpage in early December.

NIGMS TURTLE Program Staff

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Agenda

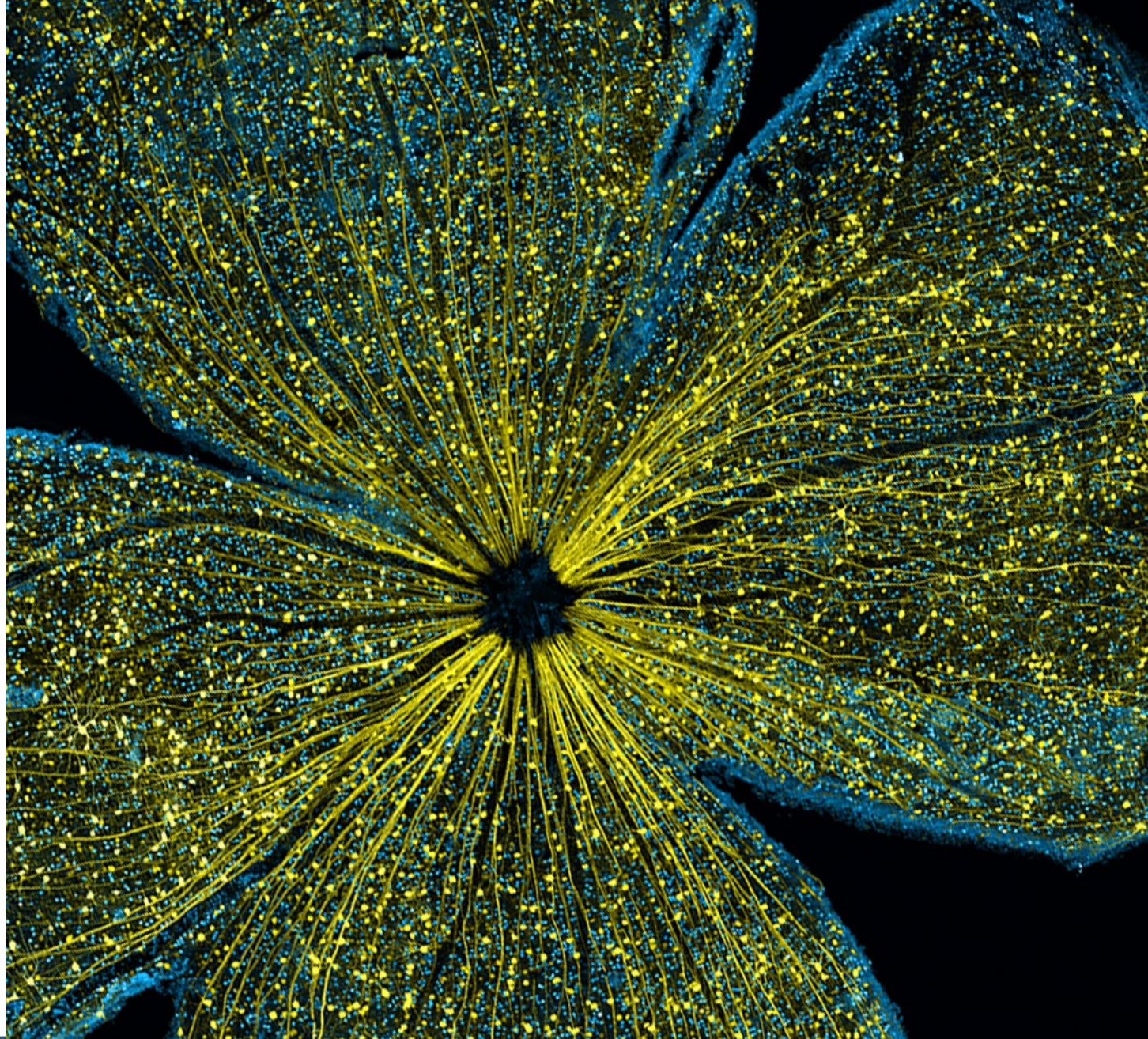
- TURTLE Background, Structure, & Eligibility
- Peer Review/Study Section
- Budget
- Final Thoughts

Disclaimer

This presentation is for informational purposes only. These slides 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 Tribal health research
- Each grant could support students from multiple Tribal Nations

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 perform research on Tribal health and health disparities 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 Tribal health research.



Methods
&
Technology

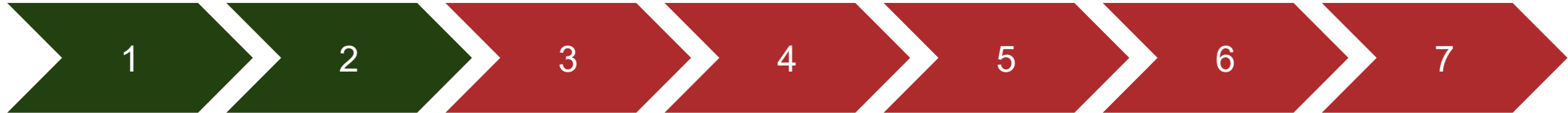
Quantitative
&
Computational

Acquiring Information,
Experimental Design
&
Data Interpretation

Management
&
Leadership

Communication
&
Teamwork

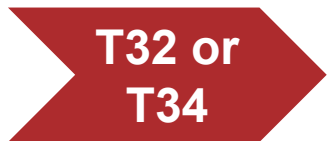
Phased Program to Build Research Capacity



- 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:

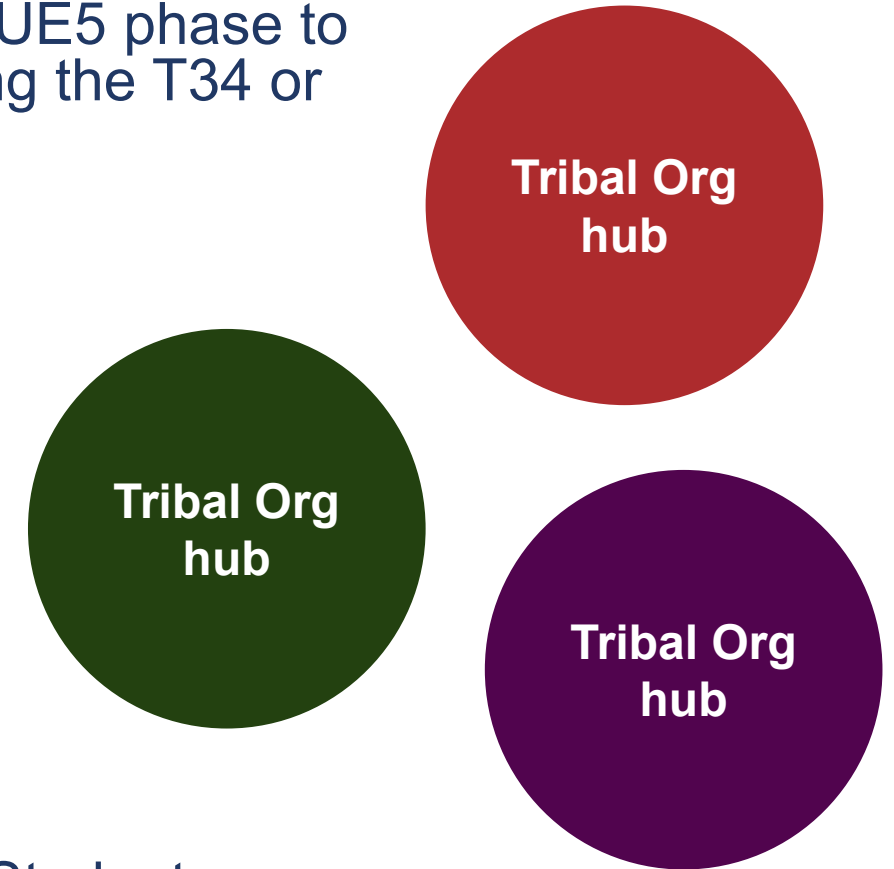
- **Adequate program personnel** with the appropriate expertise. This may require hiring or training of staff during the development phase.
- Ability to recruit a **pool of potential trainees** in alignment with the goals of the TURTLE program.
- **Plans for research training, career development, and networking activities** as well as the personnel and technologies to deliver these activities.
- **Mentor** 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.

Activities for Student Development

Each awardee will establish a “hub” or center during the UE5 phase to support student professional development activities during the T34 or T32 phase of the award.

Potential Activities:

- 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 Tribal 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 (**UE5**) and provide funds for institutional NRSA training programs (**T32 or T34**).
- Funding in the second (T34 or T32) phase will provide:
 - Five years of support for the research training of undergraduate(**T34**) or predoctoral (**T32**) trainees 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 an 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, PHS, and NIH policies.

Several Program Models Are Possible Through TURTLE

- **Grantee/Tribal Entity will** administer the award, including paying stipends, tuition remission and benefits
- **Grantee/Tribal Entity will** provide additional mentoring, career development and support to the trainees beyond what they received from research advisors and professors to create a community of support
- 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

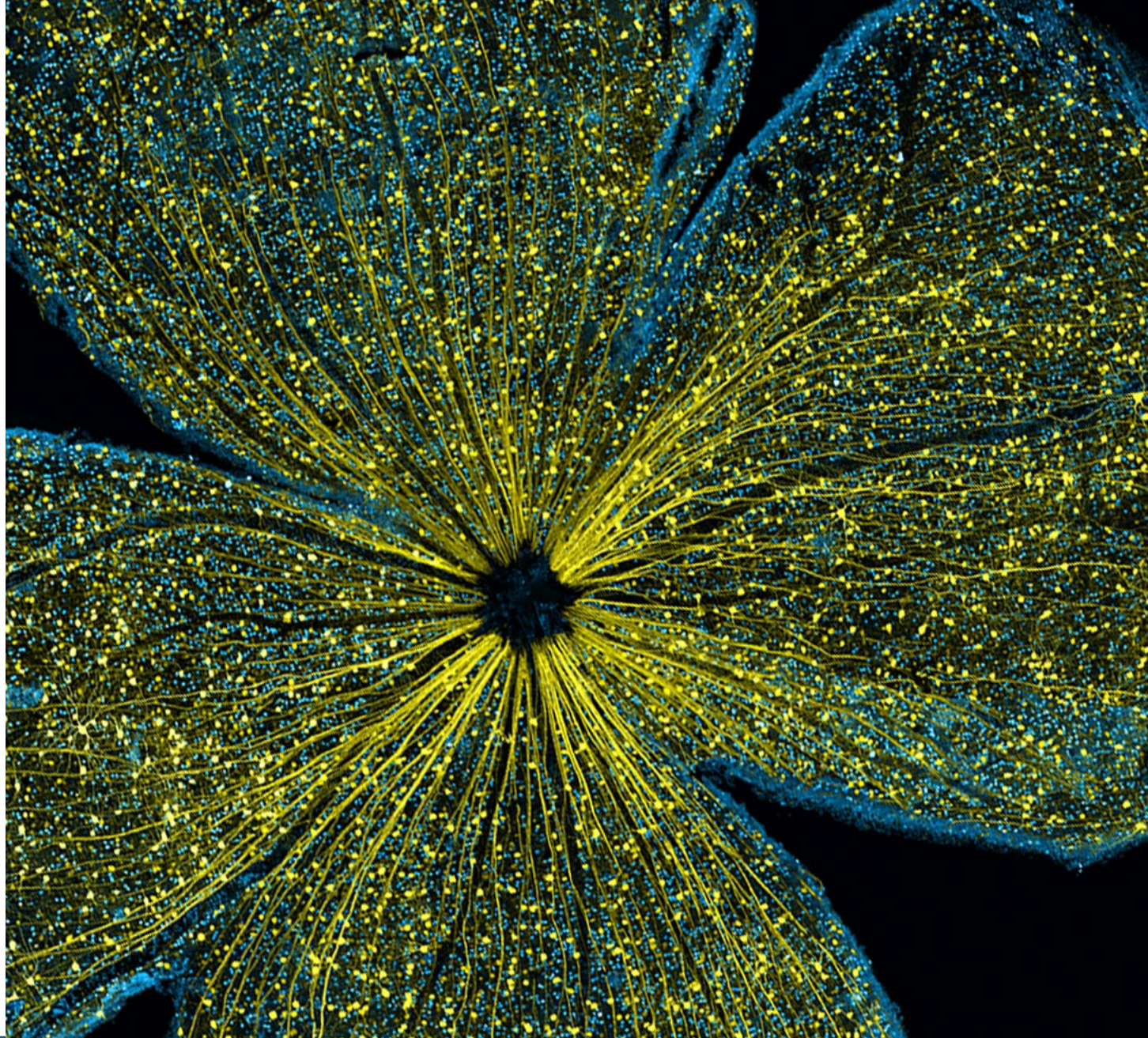
- Any individual(s) with the skills, knowledge, and resources necessary to carry out the proposed research
- **Do not need to hold a higher degree in the biomedical sciences;** however, it is expected that the PD(s)/PI(s) will consult with individuals with biomedical research experience regarding effective 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

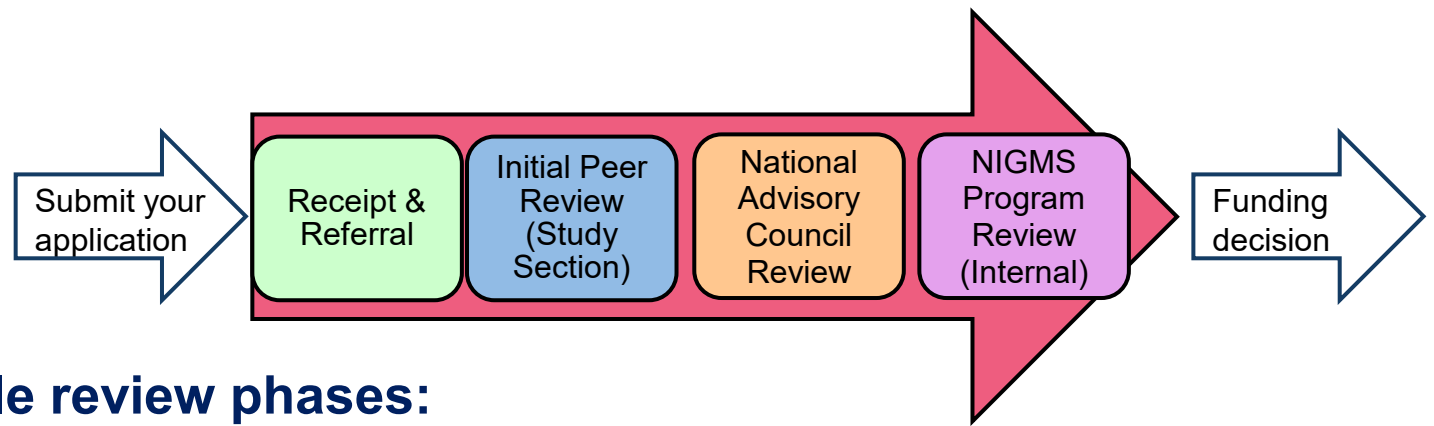
- Partnerships with non-federally recognized Tribes are welcome and could help to address the programmatic goal of reaching individuals across a broad range of Tribes
- Partnerships with universities or educational organizations that have established Tribal Offices or an official Tribal Contact
 - If 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
 - **Primary ownership and responsibility should lie with the Tribal Entity**
- Recommend application assistance from the Office of Sponsored Programs of Partnership Organizations, if deemed helpful by the Tribal Entity

Review Considerations

“Study Section”



NIH Review Process



Your application will go through multiple review phases:

- **Receipt & Referral:** After grant submission, NIH's Center for Scientific Review (CSR) will check for completeness and assign the application to the appropriate NIH Institute or Center (IC) and to a specific Scientific Review Group (SRG)/study section
- **Study Section:** Initial review conducted by a group of primarily non-federal scientists who are experts in their relevant fields
- **National Advisory Council:** Secondary review for applications with favorable scores. Council members, who include scientific and public representatives, assess the application's relevance to the IC's mission, priorities, and public health needs, and support funding recommendations.
- **NIGMS Program Review (internal):** Program Officers review and discuss the applications strengths and weaknesses, providing final funding recommendations to the Institute or Center Director.
- **Funding Decision:** The Director of the NIH Institute or Center makes the final funding decision, considering the recommendations from both review levels, the budget, their IC's research program priorities, and alignment with the [Unified NIH Funding Strategy](#)

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

After your Summary Statement is released, you can reach out to your PO for next steps

Study Section: Scored Review Criteria

- Reviewers will consider each of the **review criteria (see following slides)** in the determination of scientific merit and give a separate score for each.
- An application does not need to be strong in all categories to be judged likely to have major scientific impact.
- Scored review criteria can be found in the TURTLE NOFO.

Scored Review Criteria

Reviewers will consider **the Importance & Rationale for the Training Program:**

- Whether the proposed program will develop a pool of scientists who earn biomedical bachelor's degrees and have the technical, operational, and professional skills to pursue culturally appropriate Tribal health-related research careers.
- Whether the application provides convincing evidence that the proposed program will significantly advance the stated goal of the TURTLE program.

Scored Review Criteria

Reviewers will consider **the Program Staff, Mentors and Other Contributors:**

- Whether the PD/PI or PD/PI team have the potential to provide both administrative and research training leadership to the development and implementation of the proposed program.
- If the project proposes a multi-PD/PI team, whether the team has complementary and integrated expertise. Whether the leadership approach, governance, and organizational structure are appropriate for the proposed program.
- Whether an appropriate level of effort will be devoted by the program staff and leadership to ensure the program's intended goal is accomplished.
- Whether the approach to recruiting the Program Mentor team is likely to assemble a pool of individuals who will have the appropriate scientific background, mentor training and experience in mentoring trainees to promote the success of the TURTLE program.

Scored Review Criteria

Reviewers will consider **the Development of the Training Program:**

- Whether the objectives, plan, and timeline for the Development Plan are feasible and attainable.
- Whether the Development Plan will sufficiently develop or enhance the appropriate staff expertise, trainee recruitment procedures, grants administration capacity, career enhancement activities, information technology infrastructure, and trainee tracking resources to support a successful training phase.

Scored Review Criteria

Reviewers will consider **the Training Program Plan:**

- Whether the overall training plans and timelines are feasible, attainable and will align with the TURTLE program objectives.
- Whether the overall training plan describes effective activities for support of the research training experiences, and for skills development, cohort building, career advancement and outreach.
- Whether the planned strategy and administrative structure to oversee and monitor the program will ensure appropriate and timely trainee progress.
- The suitability of the program mentor recruitment, training and monitoring plan, as well as any plans for engaging the undergraduate research advisors at the degree-granting organization.
- Whether the planned activities are likely to recruit a sufficient pool of individuals interested in earning a bachelor's degree in a biomedical field and conducting Tribal health research.
- Whether the plans for tracking TURTLE trainees and for the program evaluation are sound and likely to provide useful information on the effectiveness of the program.

Scored Review Criteria

Reviewers will consider **the Environment:**

- Whether the environment of the applicant organization(s) will contribute to the intended goals of the proposed program.
- Whether the application provides tangible evidence of sufficient organizational commitment.

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

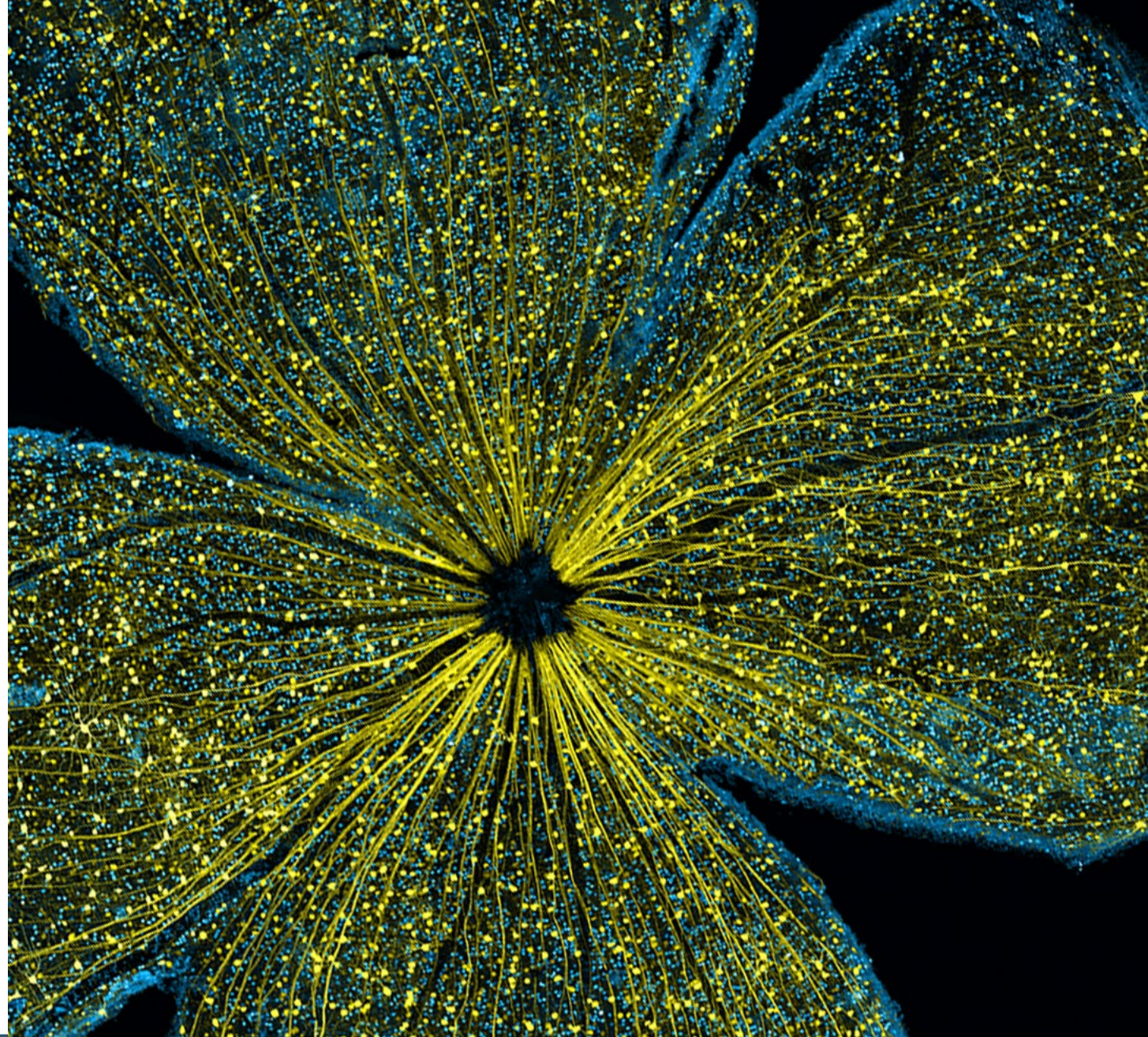
- Address all requirements of the program announcement.
 - If you have not fully formed a plan to collect trainee outcome data, at least acknowledge that you are working on it.
- Describe how your program “will work” within your institutional framework and be realistic in your program’s goals.
 - How 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.

Grants Management - Budget



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: Senior/Key Personnel (Section A)

A. Senior/Key Person

	Prefix	First	Middle	Last	Suffix	Base Salary (\$)	Months			Requested Salary (\$)	Fringe Benefits (\$)	Funds Requested (\$)
							Cal.	Acad.	Sum.			
✓	Dr.	John		Doe		120,000.00	1.80			9,000.00	3,000.00	12,000.00
Project Role: PD/PI												
✓	Dr.	Jane		Doe		120,000.00		1.20	0.60	9,000.00	3,000.00	12,000.00
Project Role: PD/PI												
✗	Dr.	Tom		Doe			1.80	1.20	0.60	9,000.00	3,000.00	12,000.00
Project Role: Consultant												
						ONLY PD/PIs SHOULD BE LISTED IN SECTION A.		MISSING BASE SALARY.		USE CALENDAR OR ACADEMIC/ SUMMER--NOT BOTH!		
Additional Senior Key Persons:						Add Attachment		w Attachment		Key Persons in the attached file		
											Total Senior/Key Person	36,000.00

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)	
2. Foreign Travel Costs	
Total Travel Cost	

F. Other Direct Costs ↩

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

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 Training Related Expenses	200,000.00
10	Number of Participants/Trainees	Total Participant/Trainee Support Costs 513,400.00

Enter estimated number of trainees here.

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

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”:

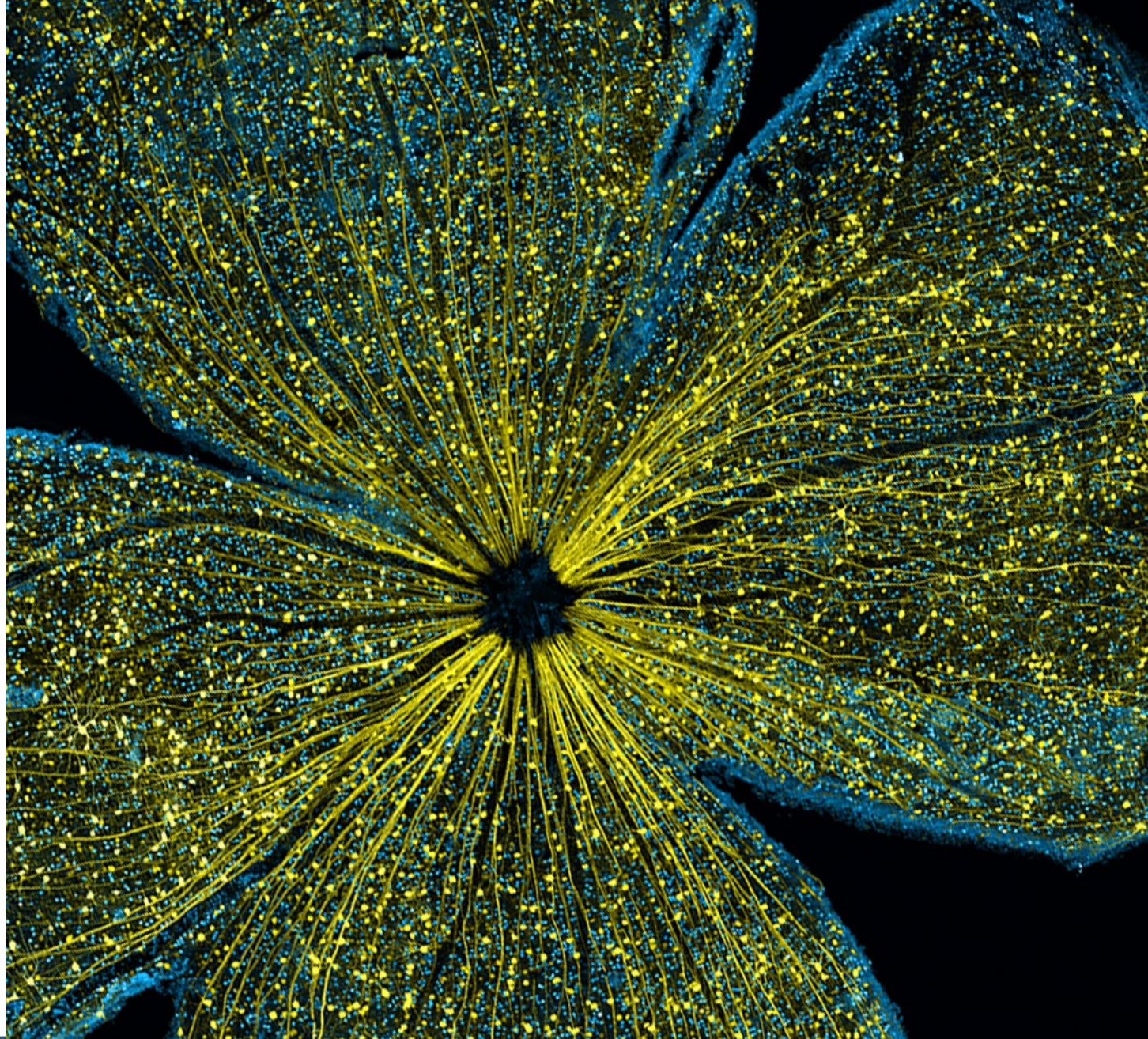
<https://www.ecfr.gov/current/title-45/subtitle-A/subchapter-A/part-75#subpart-E>

- 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

- December **Office Hours** with Program staff – **December 5, 2025 from 1-2 pm.**
- **Frequently Asked Questions (FAQs)** will be released early December.
- Please see our webpage for more information:
<https://www.nigms.nih.gov/training/Pages/turtle.aspx>

NIH & NIGMS TURTLE Points of Contact

- **General TURTLE Email:** NIGMSTurtle@nigms.nih.gov
- **Program Director:** Kalynda Gonzales Stokes – kalynda.stokes@nih.gov
Lameese Akacem – Lameese.Akacem@nih.gov
- **Scientific Review - Submission and assignment questions:** csrdrr@mail.nih.gov
- **Grants & Budget Management:** Jill Bradshaw – Jill.Bradshaw@nih.gov
- For more opportunities about Tribal research opportunities and support at NIH, contact the **NIH Tribal Health Research Office (THRO):** <https://dpcpsi.nih.gov/thro>

Best wishes on your application!

Please do not hesitate to reach out to us if you have questions.