Program Summary

**Task Force:** Thank you for the time and effort you put forth in your report. Through the USAP process, we are working to create a culture of continuous improvement; setting specific and measurable goals is an important step in the process of moving IPFW toward this culture of improvement. Part of this effort is getting individuals and units at IPFW to think differently about planning and the future. The work of Biology is critical to IPFW and we greatly appreciate the time you spent on this significant endeavor. Thank you again for being part of this important initiative. Keep up the great work!

**Criterion:** #1: Mission - How does your unit support the mission of the university? This may include your mission and vision statements. (no more than 200 words)

**Question:** Mission - How does your unit support the mission of the university? This may include your mission and vision statements. (no more than 200 words)

Biology's mission is committed to offering high quality undergraduate and graduate educational opportunities that foster current knowledge and methodology in the life sciences. Biology provides a diverse array of courses for majors and the general student body. Our faculty work diligently to develop in students important skills for critical thinking, analytical reasoning, and effective communication. They engage students in original research, and encourage free and open inquiry. Bachelor’s and Master’s degrees provide students with the education and training needed to enhance their career opportunities, or pursue further graduate studies. Biology faculty conduct and publish original research and other creative endeavors, and serve as a resource in the biological sciences for local and regional communities.

Our mission is aligned with that of COAS and IPFW through its commitment to providing students high-quality undergraduate and graduate curricula. The department is formally incorporating the expectations for IPFW graduates outlined in the university’s Baccalaureate Framework by implementing a revised set of learning outcomes for Biology majors. Our curriculum prepares students to think critically and communicate effectively. Additionally, faculty are committed to excellence in teaching, advancement and sharing of knowledge through research and creative endeavor, and engaging in service to the university and the community.

**Criterion:** #2: Accomplishments - Please list significant accomplishments from the last three years as they align with Plan 2020 goals

**Question:** I. Foster Student Success - Please list significant accomplishments from the last three years as they align with Plan 2020 goal area I: Foster student success.

Part 1 - Student Learning/Success

- Chapman, Cornell, Henbry, Jehl, Siedel scholarship/awards 75 students totaling over $155,000
• 1 National Goldwater Scholar, 1st IPFW

• 37 graduate students presented at national/International conferences

• 29 undergraduate students presented at local national-International conferences

• 9 RA's awarded 23 undergraduate paid as RA/interns from grants by Gillespie, Kingsbury, Nachappa, Paladino

• 29 undergraduates, 21 Graduate students involved in collaborative research supported by grants with Blumenthal, Daniel, DeMott, Dhawale, Gillespie, Jordan, Marshall, Mourad, Mustafa, Nachappa, Nalam, Paladino, Soule.

• 19 accepted into Medical Schools, 6 accepted into Pharmacy, 4 Accepted into Dental schools, 22 Accepted in MS or Ph.D. programs, 6 accepted into Vet School, 5 accepted in PA programs

• 94% + reenrollment between semesters.

• IPFW had 2 Ph. D. Students through Purdue Biology W/L

• Curricular Improvement

• Capstone course created, Biol 491,

• New departmental Biology Degree concentrations

• Curricular Improvements focusing on problem-based/service learning strategies in BIOL 501; development of an iPad lab manual for HORT 101- inclusion in the IPFW mobileEDU program

• Inclusion of off-site field trips and in-class guests from local and regional environmental organizations/agencies for FNR 103.

• Faculty awarded a Service Learning Faculty Fellow grants to develop problem-based-service learning components of BIOL 501

• Faculty presentations on curricular improvement “The use of course response systems to assess student learning in the classroom”, Tanya Soule& Jordan Marshall at 16th Annual Fort Wayne
Teaching Conference,

- Tanya Soule IPFW- CELT Summer Instruction Development Grant “The Dynamic Microbiology Classroom” $2,000

2013 Mustafa Developed new graduate course (BIOL 51810 Biomedicine)

Development of Course Materials:

- Marilyn Shannon, Karen McLellan published laboratory guides for BIOL 20300 and 20400 Human Anatomy and Physiology w/Photo Atlas.

- Mustafa/Blumenthal lecture notes for DL PCTX 201 Pharmacology

**Undergraduate/Graduate Student Presentations:**

+ Micah Rapp, George S. Mourad Heterologous Complementation in Yeast Reveals the Solute Specificity of the Nucleobase Cation Symporter 1 proteins of the plants Zea mays and Setaria viridis. Science and Society at IPFW, Fort Wayne, 11/1/14


+ Jessica Schein, George S. Mourad The nucleobase cation symporter 1 of Chlamydomonas reinhardtii and that of the evolutionarily distant Arabidopsis thaliana display parallel function and establish a plant-specific solute transport profile. IPFW Student Research and Creative Endeavor Symposium 4/12/13


* Kingsbury, B. and Christopher Woodley. Advances in Predicting Spring Emergence of the Eastern Box Turtle (Terrapene carolina). Ichthyologists and Herpetologists, Albuquerque, NM, 7/2013

* Robinson, Nathan, Ronel Nel, Stephen Morreale, Frank Paladino. Coastal or pelagic: updating the leatherback paradigm. 33rd ISTS Symposium, Baltimore, MD, 2/2013.

+ Dornfeld, Tera, Gabriela Blanco, Julianne Koval, Pamela Plotkin, Richard Reina, Vincent Saba, Bibi Santidrían Tomillo, Lesley Stokes, Jennifer Swiggs, Bryan Wallace, James Spotila, and Frank Paladino, Dimitris Margaritoulis. Experiencing science to cultivate the desire for conservation at home and abroad. 33rd ISTS Symposium, Baltimore, MD, 2/2013


+ Perrine, N., E. Carter and M., Jordan. An Independent Observation of facultative


+Hasina Karki, Ahmed Mustafa, Arlis LaMaster, Robert Gillespie and Shree Dhawale. Do Hatchery-raised Tilapia and Coho Salmon Have Antibiotic Resistant Bacteria in Their Guts? IPFW Student Research and Creative Endeavor Symposium, 4/12/2013


+Alexandra Okihiro, Peng Jing, and Elliott Blumenthal. Crude Elderberry (Sambucus nigra) Treatment Decreases Melanoma Tumor Size in vivo and Separation of Active Components Reveals Non-protein Fractions Capable of Suppressing Melanoma and Increasing T Lymphocyte Proliferation of Elderly Mice. Indiana Branch of the American Society for Microbiology, Spencer, IN, 4/12-13/2013.

+Alexandra Okihiro, Peng Jing and Elliott Blumenthal. Isolation and Characterization of Active Elderberry Fractions that Inhibit Melanoma Growth in vitro and in vivo. Midwest Graduate Research Symposium at the University of Toledo, 4/20/2013.


BIO Biology


+Jamison Law and *Jaiyanth Daniel. (Nov 1, 2014). Science and Society at IPFW. “Cloning a Mycobacterial Acyltransferase Gene and Expressing the Protein in Escherichia coli”

+Shelby Reyes and *Jaiyanth Daniel. (Nov 1, 2014). Science and Society at IPFW. “Expression of a Mycobacterial Fatty Acid Transport Protein in a Heterologous Bacterial Cell


*Mustafa, A. and Hough, t. Effects of Omega-3 fatty acid supplementation on aquaponic system raised tilapia (Oreochromis niloticus x Oreochromis aureus) physiology, immunology, and muscle tissue retention. Asia Pacific Aquaculture, Ho Chi Minh City, Vietnam, 12/10-14/2013.


+Shannon, r., ayon, n., and *Mustafa, A. Cell Immunological Responses in Sea Urchins Exposed to Salinity and Handling Stress. Indiana Branch of the American Society for Microbiology 3/28/2014

+Shannon, r., ayon, n., and Mustafa, A. Physiological and Immunological Responses of Sea Urchins Exposed to Salinity and Handling Stress. 129th Indiana Academy of Science, Indianapolis, IN, 3/15/2014.


*Bruce Kingsbury and +Christopher Woodley. Reducing the Impacts of Prescribed Fire on the Eastern Box Turtle (Terrapene carolina). Indiana Chapter of The Wildlife Society. 2/28./14

+Emily Stulik and *Bruce Kingsbury. Modeling Anuran Occupancy and Habitat Use in a System of Restored Wetlands. Ichthyologists and Herpetologists, Chattanooga, TN. 8/14

+Lauren Hall and *Bruce Kingsbury. Basking Platforms and Wildlife Cameras as Novel Monitoring Techniques for Aquatic Reptiles. Ichthyologists and Herpetologists, Chattanooga, TN. 8/1/14


+Evin Carter, +Bryan Eads, +Matthew Farmer and *Bruce Kingsbury. Demonstrating Roads as Barriers
to Snakes using a Modified Random Walk: The Case of the Copperbelly. Ichthyologists and Herpetologists, Chattanooga, TN. 8/2/14.


+Naurin, S., and *T. Soule (November 2014) “Assessing the role of a putative response regulator in sunscreen biosynthesis in the cyanobacterium Nostoc punctiforme ATCC 29133” Science and Society at IPFW

+Janssen, J., and T. Soule (November 2014) “Analysis of a putative histidine kinase associated with sunscreen biosynthesis in the cyanobacterium Nostoc punctiforme ATCC 29133” Science and Society at IPFW-


+Naurin, S., and *T. Soule (April 2014) “Assessing the role of a putative response regulator in sunscreen biosynthesis in the cyanobacterium Nostoc punctiforme ATCC 29133” Indiana Branch of the American Society’s Annual Meeting, Turkey Run State Park, Marshall, IN-


+Lothamer, J., and *T. Soule (April 2014) “Measuring the expression of genes associated with extracellular polymeric substances in Nostoc punctiforme” Indiana Branch of the American Society’s Annual Meeting, Turkey Run State Park, Marshall, IN

+Lothamer, J., and *T. Soule (March 2014) “Measuring the expression of genes associated with extracellular polymeric substances in Nostoc punctiforme” Indiana Academy of Sciences Annual Meeting, Indianapolis, IN-

+Shipe, D., and *T. Soule (March 2014) “Slime production associated with sunscreen-producing cyanobacteria” Indiana Academy of Sciences Indianapolis, IN-

*Nachappa, P., +Culkin, C., and *Nalam, V.J. Plant-mediated effects of drought stress on soybean aphids and virus infection. @ Section Symposium – Basic approaches to Grand Challenges: Applying Insect Ecology to Improve Agricultural Sustainability and Food Security at Entomology, Portland, OR 11/16-19/2014


+Culkin, C., * Nalam, V. J., and *Nachappa, P. 2014. Drought stress in soybean: Impacts on soybean aphid populations (Aphis glycines Matsumura) and Soybean mosaic virus infection. Indiana Academy of
**Biology PUBLICATIONS: + with IPFW Student * = Faculty Average = 20/year**


**+Rumman Hossain and *Ahmed Mustafa. 2013. Effects of puerarin on the reduction of glucose and promotion overall health in acutely stressed, Chinook salmon. ACTA Ichthyologica et. Piscatoria, 43: 85-93.**


**+Marshall, J. M. Occurrence of Diabrotica undecimpunctata howardi Barber (Coleoptera) feeding on Cirsium pitcheri flowers. Great Lakes Entomologist 46:139-142. 2013.**


+Robinson N.J, +S Valentine, P. Santidrian-Tomillo,V. Saba, J. Spotila & *Frank V. Paladino.


*V. Nalam, J. Keereetaweep, J. Shah. 2013. The green peach aphid, Myzus persicae, acquires a LIPOXYGENASE5-derived oxylipin from Arabidopsis thaliana, which promotes colonization of the host plant. Plant Signaling & Behavior 8 (1), 0-13


**Question:** III. Regional Hub - Please list significant accomplishments from the last three years as they align with Plan 2020 goal area III: Serve as a Regional Intellectual, Cultural, and Economic Hub for Global Competitiveness.

**Community Connections and Engagement**

Professor George Mourad Professor Ahmed Mustafa were selected as featured faculty.

Dr. Robert Gillespie was awarded the IPFW Faculty Community Engagement Award work/interaction with Three Rivers Authorities.

d. **Consultations**

Bruce Kingsbury's Copperbelly Water Snake Recovery Team, a member of the Technical Advisory Committee for Indiana DNR, member Science Advisory Board "Little River Wetlands Project": advised regarding the watershed separation berm at Eagle Marsh: member Parks Subcommittee in the Riverfront Development: City of Fort Wayne investigated feasibility of ecology center facility: species/habitat expert during development of the State Wildlife Action Plan: assisted the Clear Lake Township Land Conservancy presentations: provided GIS service to Sherrie Steiner (Sociology) exploring patterns of disease/pollution in Blackford County, IN: participating in River Summit II conference March 2015

**Question:** IV. - Create a Stronger Univ - Please list significant accomplishments from the last three years as they align with Plan 2020 goal area IV: Create a Stronger University through Improving the Support of Stakeholders and the Quality and Efficiency of the Organization.

**Outstanding Individual Accomplishments**

Frank Paladino received the International Sea Turtle Society Lifetime Achievement Award.

**GRANTS AWARDED TO OUR STUDENTS+/FACULTY 2012 – 14**  
+ = Student  * = Faculty department went from $105,000/2012 to $441,000/2014

• Jaiyanth Daniel 2013 “Investigating the Biochemical Pathways of Lipid Metabolism in the Human Pathogen Causing Latent Tuberculosis Disease” PRF $8,000.

*J. Daniel 2014 PRF  $ 8000

*J. Daniel 2014 IPFW ORESP Grant-in-Aid $ 1000


*Mark Jordan Indiana Campus Compact Service Engagement Grant 2013, $2,250


*Kingsbury, Bruce. 2014. “Response of Eastern Massasauga to Habitat Alterations by Fire and Forest Management at Camp Grayling.” Michigan Department of Military and Environmental Affairs. $39,600


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* George S. Mourad (2014), 2014 IPFW Featured Faculty ($1,000)

+ Fuelling, R. R. 2013 Indiana Academy of Science–$1,105.

+ Amanda Stoffer, George S. Mourad (2013), Research Support Fund ($1,000).

+ Micah Rapp, George S. Mourad (2013), Research Support Fund ($1,000).

* George S. Mourad, Pippert Science Research Scholar Award, 2013, $2,500.

* George S. Mourad (2014), 2014 IPFW Featured Faculty ($1,000)


Nachappa, P. 2013 National Institute of Food and Agriculture-Agriculture and Food Research Initiative Competitive Grants Program (NIFA-AFRI)–$149,995.

*Nachappa, P. 2013. Efficiency of salicylate and jasmonate signaling elicitors in conferring acquired systemic resistance against soybean aphid and soybean mosaic virus. PRF, $8,000.

*Nachappa, P. 2013. Dissecting the ecological and molecular interaction between the plant pathogen, Candidatus Liberibacter solanacearum and the potato psyllid, Bactericera cockerelli. USDA Research Initiative Texas A & M University, $10,000

*Punya Nachappa and Christian Krupke 2012 have received a grant entitled “surveying Indiana Soybean for Soybean Vein Necrosis virus and evaluating new management practices” Indiana Soybean Alliance $29,868

*Vamsi Nalam and Christian Krupke 2013 “Engineering A Host Defense Regulatory Gene, PHYTOALEXIN DEFICIENT4 (PAD4) For Enhancing Resistance to Soybean Aphid” Indiana Soybean Alliance $27,923

*Paladino F.. V, Earthwatch 2014 Costa Rican Sea Turtles $58,000

*Paladino, F. V. Sonoma County Community Foundation 2014. Cabuyal Beach Black Turtle Studies $39,500

• Paladino F. V. Earthwatch. 2013 Costa Rican Sea Turtles–$74,000

• Paladino, F. V. 2013 Leatherback Trust. South African Sea Turtle Migrations and Biology–$28,000


+ Hill, J. Paladino 2013. Study of nesting Hawksbill turtles on St. Croix. USFWS, $2,000.*

* Peters: 2013 Pippert Science Research Scholar Award, $2000 COAS, IPFW

Bennett, J. and *Soule, T. “Expression of genes associated with sunscreen biosynthesis in a regulatory mutant of the cyanobacterium *Nostoc punctiforme*” Indiana Academy of Sciences Senior Research Grant, $1700, Fall 2014-Fall 2015
*Soule, T. and F. Garcia-Pichel. "Differential transcriptomic analysis of stress induced by ultraviolet radiation and reactive oxygen species in the cyanobacterium Nostoc punctiforme ATCC 29133" NSF Research Opportunity Award (ROA), $15,000, Summer 2014

• Soule, T. 2013 NSF Research Opportunity Award (ROA)–Summer $15,000

• Soule, T. 2013 Indiana Academy of Sciences –$1,102

• Soule, T. 2013 American Society for Microbiolog (ASMCUE) Travel Grant–$750

*Soule, T. 2013. Impacts of ultraviolet radiation and oxidative stress on slime production in cyanobacteria. IPFW $8,000.

**Question:** Other Accomplishments - Please list any other significant accomplishments from the last three years that do not align with Plan 2020.

**Criterion:** #3: Accreditations - Program specific accreditation and status

**Question:** Accreditations - What program-specific accreditations and status do you have, if any?

"The Council on Accreditation of the Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC International) commends IPFW and the staff for providing and maintaining an excellent program of laboratory animal care and use. Especially noteworthy were the strong institutional commitment to animal welfare and the entire animal care and use program;... the excellent personnel training program ; the well organized and integrated occupational health and safety program; and the attention to detail in rodent surgical, IACUC, and facility records. The Council ..conforms with AAALAC International standards.... Therefore, FULL ACCREDITATION" from a 11/2014 letter J. Norton D.V.M., President AAALAC Council.

**Question:** Constraints/Benefits - How do these accreditations constrain or benefit the work of your unit, if applicable?

AAALAC Accreditation benefits faculty/students in Biology, Psychology, Chemistry, Mae Ed at IPFW. Benefit all faculty and students engaged in research involving animals. Accreditation signifies IPFW is a University maintaining the highest level of care, be they teaching or research, involving animals. This is Essential for ethical research, teaching lab activities in all aspects of biology. Supports our mission to engage students, advance biological knowledge, as well serve the community with meaningful/ethical animal research that will be eligible for publication in International Reviewed Journals.

**Criterion:** #4: Laws and Mandates - Federal and state laws or mandates that your unit addresses
Question: Federal and State Laws - What federal and/or state laws or mandates do you address, if any?

N/A

Question: Constraints/Benefits - How do these federal and state laws or mandates constrain or benefit the work of your unit?

N/A

Criterion: #5: Inefficiencies - Activities that you spend resources on inefficiently or in ways that do not support the mission.

Question: Inefficient use of resources - On what activities, if any, do you spend resources (money, time, people, etc.) inefficiently or in ways that do not support the mission of your unit or the university? List as many as apply.

N/A

Criterion: #6: IR and Budget Review - Review of your department profile and budget

Question: Contextualize IR data - Upon review of your IR Department Profile (for academic units) and FY 14-15 Budget information, are there any data you want to correct or contextualize? To view your profile or budget visit the Office of Institutional Effectiveness website: http://www.ipfw.edu/offices/ir/profiles/

Please note that since 2011 there has been a steady increase in external funds procured by Biology and also a steady increase in graduate enrollment while undergraduate numbers have remained stable.

Criterion: #7: Goal One - In this criterion, you will identify your unit goals and tell us how they align to Plan 2020, how they are measured, and what resources you need to meet them.

Task Force:
1. Comment on the specificity of the goal:
   High

2. Comment on the goal's measures:
   Appropriate

3. Comment on the unit’s ability to achieve the goal (include a consideration of the departmental profile and budget data):
   High with good track record

4. Comment on the goals’ relevance:
   High

5. Comment on the timeline of the goal:
   Appropriate

Possible opportunities for collaboration or suggestions for addressing a gap:
None

**Question:** Unit Goal - What is your unit goal?

Improve Departmental Tools for Programmatic Assessment:

**Question:** IPFW Goal - What 2020 goal(s) does this unit goal align with? List as many as apply. If it does not align, you may write “NA” or clarify.

I. A. 1 Improve quality/fidelity of Assessment

I. A. 2 Use assessment data to improve student learning

**Question:** Priority Level - Is the unit goal high, medium, or low priority? Limit your high-priority unit goals to 3 to 5.

High
**Question:** Actions - What action(s) does your unit plan to take to support this unit goal?

Revise assessment plan proposing new methodologies for assessing program learning outcomes for undergraduate, graduate general education curricula.

**Question:** Metrics - With what metrics will you assess progress toward accomplishing this unit goal on an annual basis?

Accomplished when the assessment plan approved by department faculty.

**Question:** Resources - Are you able to accomplish this unit goal with your current resources?

Available in Biology

**Question:** Needed Resources - If you don’t have enough resources, what additional resources do you need to accomplish this unit goal?

No additional funded needed at this time.

**Question:** Challenges - What challenges, other than financial resources, might affect your progress toward accomplishing this unit goal?

None

**Question:** Timeline - If achieving this unit goal will take longer than one year, what is your timeline for implementing and accomplishing it?

We expect to complete assessment plans by the following dates: Undergraduate BS Program, 15 May 2015; Graduate MS Program, 15 December 2015; General Education Curriculum, 15 May 2016.

**Criterion:** #8: Goal Two - In this criterion, you will identify your unit goals and tell us how they align to Plan 2020, how they are measured, and what resources you need to meet them.

**Task Force:**
1. Comment on the specificity of the goal:
High

2. Comment on the goal’s measures:
Appropriate

3. Comment on the unit’s ability to achieve the goal (include a consideration of the departmental profile and budget data):
High with good track record

4. Comment on the goal’s relevance:
High

5. Comment on the timeline of the goal:
Appropriate

Possible opportunities for collaboration or suggestions for addressing a gap:
None

**Question:** Unit Goal - What is your unit goal?

Increase Student Engagement

**Question:** IPFW Goal - What 2020 goal(s) does this unit goal align with? List as many as apply. If it does not align, you may write “NA” or clarify.

2020 Goal:

I. Foster Student Success:

B. 1. Increase opportunities for engaged experiential learning-service learning-internships.

II. Promote Creation, Integration, Application of knowledge.

B. Promote mentoring between faculty-students

II. Promote Creation, Integration, Application of knowledge

C. Promote development opportunities for faculty-student engagement with community for integration of knowledge.

**Question:** Priority Level - Is the unit goal high, medium, or low priority? Limit your high-priority unit goals to 3 to 5.

High
In this criterion, you will identify your unit goals and tell us how they align to Plan 2020, how they are measured, and what resources you need to meet them.

**Task Force:**
1. Comment on the specificity of the goal:

High

2. Comment on the goal's measures:

Appropriate but would benefit from a baseline measurement that identifies the number of students involved in formal research credits

3. Comment on the unit’s ability to achieve the goal (include a consideration of the departmental profile and budget data):

High with good track record

4. Comment on the goal’s relevance:

High

5. Comment on the timeline of the goal:

Appropriate

Possible opportunities for collaboration or suggestions for addressing a gap:

None

**Question:** Unit Goal - What is your unit goal?

Promote Faculty-Student Research

**Question:** IPFW Goal - What 2020 goal(s) does this unit goal align with? List as many as apply. If it does not align, you may write “NA” or clarify.

I.B.4 expanded use of high-impact instruction-advising
I.B.5 transforming the concept of the college classroom and delivery of education
II.B promoting mentoring relationships between faculty-students engaged in the creation, integration of knowledge
II.A project future regional, national, and international demand for research and collaboration.
II.C Develop faculty-student engagement with the community.

**Question:** Priority Level - Is the unit goal high, medium, or low priority? Limit your high-priority unit goals to 3 to 5.

Medium

**Question:** Actions - What action(s) does your unit plan to take to support this unit goal?
faculty with research release meet policy expectations.

Research presentation outside of department by 100% of Honors in Biology students.

Promote student engagement in formal research credits (BIOL 19500, 29500, 59500, 69800).

Formalize faculty incentive via departmental policy

**Question:** Metrics - With what metrics will you assess progress toward accomplishing this unit goal on an annual basis?

100% of faculty meet departmental expectations for release.

100% of graduating Honors in Biology students presented their research outside the department.

Increase involvement of students in formal research credits (BIOL 19500, 29500, 59500, 69800).

Approval of strategy for formal faculty incentive

**Question:** Resources - Are you able to accomplish this unit goal with your current resources?

May require additional S & E-faculty

**Question:** Needed Resources - If you don’t have enough resources, what additional resources do you need to accomplish this unit goal?

Increased S-E-travel.

**Question:** Challenges - What challenges, other than financial resources, might affect your progress toward accomplishing this unit goal?

Limitations in research infrastructure, space-faculty time. Fill empty faculty line.

**Question:** Timeline - If achieving this unit goal will take longer than one year, what is your timeline for implementing and accomplishing it?

Policy implementation for faculty by 2016-17

**Criterion:** #10: Goal Four - In this criterion, you will identify your unit goals and tell us how they align to Plan 2020, how they are measured, and what resources you need to meet them.

**Task Force:**
1. Comment on the specificity of the goal:
   Appropriate but would benefit from baseline measurements on action items
   
2. Comment on the goal's measures:
   Appropriate but would benefit from baseline measurements and target numbers. As an example, to what degree will collaborations between research projects and the regional community be increased?
   
3. Comment on the unit’s ability to achieve the goal (include a consideration of the departmental profile and budget data):
   Goal seems achievable but would benefit from a more concrete action plan and target numbers
   
4. Comment on the goal’s relevance:
   High
   
5. Comment on the timeline of the goal:
   Seems reasonable but would benefit from a more concrete action plan, including a task-level timeline, and additional metrics described above
   
Possible opportunities for collaboration or suggestions for addressing a gap:
   None

**Question:** Unit Goal - What is your unit goal?

Regional Intellectual Hub

**Question:** IPFW Goal - What 2020 goal(s) does this unit goal align with? List as many as apply. If it does not align, you may write “NA” or clarify.

**2020 Goals:**

III.A. Expand collaborations-research opportunities regionally, nationally, globally,

III.B. Provide access to intellectual programming

III.D. Provide credit enrichment for the community

**Question:** Priority Level - Is the unit goal high, medium, or low priority? Limit your high-priority unit goals to 3 to 5.

Medium

**Question:** Actions - What action(s) does your unit plan to take to support this unit goal?
Increase collaborations-research projects with regional community.

Increased proportion of faculty engaged in collaborations-research with community.

Establish policy valuing, supporting and rewarding community engagement.

Establish international relations with laboratories-facilities & promote international student engagement.

**Question:** Metrics - With what metrics will you assess progress toward accomplishing this unit goal on an annual basis?

Increased projects with regional, national and International community.

Increased outcomes w/presentations, publications.

Increased proportion of faculty engaged in research projects

Increased faculty engagement in public programming off-campus with community.

**Question:** Resources - Are you able to accomplish this unit goal with your current resources?

ERC, Crooked Lake Biological Station, Goldring-Gund Marine Lab

**Question:** Needed Resources - If you don’t have enough resources, what additional resources do you need to accomplish this unit goal?

May need travel funds

**Question:** Challenges - What challenges, other than financial resources, might affect your progress toward accomplishing this unit goal?

None

**Question:** Timeline - If achieving this unit goal will take longer than one year, what is your timeline for implementing and accomplishing it?

Policy approval 2016-2017

**Criterion:** #11: Goal Five - In this criterion, you will identify your unit goals and tell us how they align to Plan 2020, how they are measured, and what resources you need to meet them.

**Question:** Unit Goal - What is your unit goal?
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**Question:** IPFW Goal - What 2020 goal(s) does this unit goal align with? List as many as apply. If it does not align, you may write “NA” or clarify.

**Question:** Priority Level - Is the unit goal high, medium, or low priority? Limit your high-priority unit goals to 3 to 5.

**Question:** Actions - What action(s) does your unit plan to take to support this unit goal?

**Question:** Metrics - With what metrics will you assess progress toward accomplishing this unit goal on an annual basis?

**Question:** Resources - Are you able to accomplish this unit goal with your current resources?

**Question:** Needed Resources - If you don’t have enough resources, what additional resources do you need to accomplish this unit goal?

**Question:** Challenges - What challenges, other than financial resources, might affect your progress toward accomplishing this unit goal?

**Question:** Timeline - If achieving this unit goal will take longer than one year, what is your timeline for implementing and accomplishing it?

**Criterion:** #12: Goal Six - In this criterion, you will identify your unit goals and tell us how they align to Plan 2020, how they are measured, and what resources you need to meet them.

**Question:** Unit Goal - What is your unit goal?

**Question:** IPFW Goal - What 2020 goal(s) does this unit goal align with? List as many as apply. If it does not align, you may write “NA” or clarify.

**Question:**
Priority Level - Is the unit goal high, medium, or low priority? Limit your high-priority unit goals to 3 to 5.

**Question:** Actions - What action(s) does your unit plan to take to support this unit goal?

**Question:** Metrics - With what metrics will you assess progress toward accomplishing this unit goal on an annual basis?

**Question:** Resources - Are you able to accomplish this unit goal with your current resources?

**Question:** Needed Resources - If you don’t have enough resources, what additional resources do you need to accomplish this unit goal?

**Question:** Challenges - What challenges, other than financial resources, might affect your progress toward accomplishing this unit goal?

**Question:** Timeline - If achieving this unit goal will take longer than one year, what is your timeline for implementing and accomplishing it?

**Criterion:** #13: Goal Seven - In this criterion, you will identify your unit goals and tell us how they align to Plan 2020, how they are measured, and what resources you need to meet them.

**Question:** Unit Goal - What is your unit goal?

**Question:** IPFW Goal - What 2020 goal(s) does this unit goal align with? List as many as apply. If it does not align, you may write “NA” or clarify.

**Question:** Priority Level - Is the unit goal high, medium, or low priority? Limit your high-priority unit goals to 3 to 5.

**Question:** Actions - What action(s) does your unit plan to take to support this unit goal?
**Question:** Metrics - With what metrics will you assess progress toward accomplishing this unit goal on an annual basis?

**Question:** Resources - Are you able to accomplish this unit goal with your current resources?

**Question:** Needed Resources - If you don’t have enough resources, what additional resources do you need to accomplish this unit goal?

**Question:** Challenges - What challenges, other than financial resources, might affect your progress toward accomplishing this unit goal?

**Question:** Timeline - If achieving this unit goal will take longer than one year, what is your timeline for implementing and accomplishing it?

**Criterion:** #14: Goal Eight - In this criterion, you will identify your unit goals and tell us how they align to Plan 2020, how they are measured, and what resources you need to meet them.

**Question:** Unit Goal - What is your unit goal?

**Question:** IPFW Goal - What 2020 goal(s) does this unit goal align with? List as many as apply. If it does not align, you may write “NA” or clarify.

**Question:** Priority Level - Is the unit goal high, medium, or low priority? Limit your high-priority unit goals to 3 to 5.

**Question:** Actions - What action(s) does your unit plan to take to support this unit goal?

**Question:** Metrics - With what metrics will you assess progress toward accomplishing this unit goal on an annual basis?
**Criterion:** #15: Goal Nine - In this criterion, you will identify your unit goals and tell us how they align to Plan 2020, how they are measured, and what resources you need to meet them.

**Question:** Unit Goal - What is your unit goal?

**Question:** IPFW Goal - What 2020 goal(s) does this unit goal align with? List as many as apply. If it does not align, you may write “NA” or clarify.

**Question:** Priority Level - Is the unit goal high, medium, or low priority? Limit your high-priority unit goals to 3 to 5.

**Question:** Actions - What action(s) does your unit plan to take to support this unit goal?

**Question:** Metrics - With what metrics will you assess progress toward accomplishing this unit goal on an annual basis?

**Question:** Resources - Are you able to accomplish this unit goal with your current resources?

**Question:** Needed Resources - If you don’t have enough resources, what additional resources do you need to accomplish this unit goal?
**Question**: Challenges - What challenges, other than financial resources, might affect your progress toward accomplishing this unit goal?

**Question**: Timeline - If achieving this unit goal will take longer than one year, what is your timeline for implementing and accomplishing it?

**Criterion**: #16: Goal Ten - In this criterion, you will identify your unit goals and tell us how they align to Plan 2020, how they are measured, and what resources you need to meet them.

**Question**: Unit Goal - What is your unit goal?

**Question**: IPFW Goal - What 2020 goal(s) does this unit goal align with? List as many as apply. If it does not align, you may write “NA” or clarify.

**Question**: Priority Level - Is the unit goal high, medium, or low priority? Limit your high-priority unit goals to 3 to 5.

**Question**: Actions - What action(s) does your unit plan to take to support this unit goal?

**Question**: Metrics - With what metrics will you assess progress toward accomplishing this unit goal on an annual basis?

**Question**: Resources - Are you able to accomplish this unit goal with your current resources?

**Question**: Needed Resources - If you don’t have enough resources, what additional resources do you need to accomplish this unit goal?

**Question**: Challenges - What challenges, other than financial resources, might affect your progress toward accomplishing this unit goal?
**Question:** Timeline - If achieving this unit goal will take longer than one year, what is your timeline for implementing and accomplishing it?