



SUMMARY | PEST MANAGEMENT ADVISORY COMMITTEE ALLIANCE GRANT PROPOSALS MEETING CALIFORNIA DEPARTMENT OF PESTICIDE REGULATION

May 11, 2023

Produced by the Consensus and Collaboration Program, CSU Sacramento College of Continuing Education

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1. Attendance

Pest Management Advisory Committee (PMAC) Members

- | | |
|---|---|
| 1. Bill Allayaud, Environmental Working Group | 6. Terry Gage, California Agricultural Aircraft Association |
| 2. Greg Browne, USDA Agricultural Research Service | 7. Thomas Getz, UC Cooperative Extension |
| 3. Robert Ehn, California Garlic and Onion Research Committee | 8. Brian Gress, California Department of Food and Agriculture |
| 4. Jonathan Evans, Center for Biological Diversity | 9. Jon Holmquist, Association of Applied IPM Ecologists |
| 5. Jim Farrar, Director, Statewide UC IPM Program | 10. Humberto Izquierdo, California Agricultural Commissioners and Sealers Association |

11. Victoria Kalkirtz, California Stormwater Quality Association
12. Melissa Koshlaychuk, California Strawberry Commission
13. Gabriele Ludwig, Almond Board of California
14. Nick Lupien, California Association of Pest Control Advisers
15. Melissa O'Neal, Marrone Bio Innovations, Inc.
16. Nicole Quinonez, Consumer Specialty Products Association
17. Jim Steed, Pest Control Operators of California
18. Eric Stein, Western Plant Health Association
19. Siavash Taravati, UC Cooperative Extension
20. Karey Windbiel-Rojas, Statewide UC IPM Program

California Department of Pesticide Regulation (DPR)

21. Julie Henderson
22. Aimee Norman
23. Leslie Talpasanu
24. Dr. Matt Fossen
25. Jordan Weibel
26. Dr. John Gerlach
27. Hannah Jensen
28. Catherine Bilheimer
29. Veronica Tovar
30. Bailey Stevens
31. Kimberly Crispin
32. Dr. Brian Ingel
33. Dr. Andy Nguyen

Facilitation Support, CSU Sacramento

34. Ariel Ambruster
35. Julia Csernansky

2. Opening Comments and Background

Introductions and Opening Comments

Julie Henderson, Director, Department of Pesticide Regulation (DPR), welcomed everyone and thanked Pest Management Advisory Committee (PMAC) members for their time and commitment to reviewing Alliance Grant proposals this year.

Ms. Henderson recognized Farzaneh Khorsandi and her alternate Irwin Donis-Gonzalez, both stepping down after representing the UC Davis Biological and Agricultural Engineering Department in the Academia and Public Foundations category.

Ms. Henderson formally welcomed new committee members Karey Windbiel-Rojas, Associate Director for Urban and Community Integrated Pest Management for the UC ANR Statewide IPM Program, and Siavash Taravati, Urban Integrated Pest Management Advisor for UC Cooperative Extension in Los Angeles.

3. Alliance Grant Proposal Overview

Dr. Andy Nguyen presented the meeting agenda and highlighted the Alliance Grant proposal discussion as the focus of the meeting. He then shared updates regarding the 2023 IPM Grants Program.

Dr. Nguyen indicated that the application period for both the Alliance and Research Grants Programs for 2024 will open this summer. There is \$500,000 available for the Research Grants Program and \$400,000 available for the Alliance Grants Program.

For the upcoming 2024 application period, DPR will be focusing on several priority topic areas:

- IPM for underserved or disadvantaged communities
- Decreasing the use of high-risk/high-volume pesticides (such as fumigants like 1,3-dichloropropene or sulfuryl fluoride)
- Advancement of urban IPM and safer, more sustainable pest management tools and strategies in urban settings
- Meeting the IPM needs of small growers
- Two or more of the three sustainability pillars referenced in the Sustainable Pest Management Roadmap:
 - Human Health and Social Equity
 - Environmental Protections
 - Economic Viability

Dr. Nguyen noted that this year's Alliance Grant Program has \$1.5 million in available. Additionally, DPR retained changes adopted during 2022 to simplify the application process for applicants. This year's grants will consider projects that have a two-and-a-half-year timeline. DPR enhanced outreach and assistance this year, holding 10 virtual information sessions and providing sample proposal applications for both the Research and Alliance Grant Programs.

With eight proposals submitted for Alliance Grants this year, there was a total funding request of around \$3.5 million dollars, more than twice the amount available.

Dr. Nguyen shared the initial ranking, as presented in the following chart, shown in ranked order.

2023-2024 Alliance Grant Summary of Proposals

Proposal Short and Full Title	Principal Investigator	Budget
Mehta - IPM Model for Affordable Housing Expansion of the Prevention-Centered IPM Model for Affordable Housing: Building the Capacity of the Affordable Housing Sector to Implement Pest Prevention and IPM Best Practices	Ms. Sraddha Mehta	\$321,670
Baumgartner - Sustainable PM Trainings Training Pest Control Practitioners on Sustainable Pest Management (SPM) Alternative Approaches	Ms. Jo Ann Baumgartner	\$463,313
Baer - Safeguarding California's Honey Bees BeeALERT: Safeguarding California's Honey Bees and their Pollination Services from Pesticide Exposure	Dr. Boris Baer	\$295,999
Eskalen - IPM for Grapevine Trunk Diseases Demonstration and Implementation of IPM Practices for the Control of Grapevine Trunk Diseases	Dr. Akif Eskalen	\$532,102
Anderson - Urban IPM Apprenticeship Urban IPM Apprenticeship Program: Expanding IPM Implementation Across California's Urban Areas	Mr. Ryan Anderson	\$172,575
Gamez - Controlling NOW with pgSIT Controlling Navel Orangeworm Pests using pgSIT, a Novel Genetic Sterile Insect Technology	Dr. Stephanie Gamez	\$407,869
Senf- IPM on Fallow Fields Utilizing IPM Practices on Fallow Fields and Unused Field-edges for Pesticide Reduction	Mr. Evan Senf	\$185,333
Trask - Reducing High-Risk Urban Pesticide Impacts Reducing Impacts from High-Risk Urban Pesticides through Testing, Outreach, and Demonstrations	Ms. Jennifer Trask	\$1,077,568

Nineteen PMAC members reviewed the proposals ahead of the meeting and submitted ranks for each. Dr. Nguyen shared the initial ranking, as presented in the following chart, shown in ranked order.

2023 Alliance Grants Program Initial PMAC Proposal Rankings (average of 19 rankers)

Principal Investigator	Project Short Title	Final Ranking	Average	Standard Deviation	High	Low
Mehta	IPM Model for Affordable Housing	1	2.72	1.91	1	7
Baumgartner	SPM Training for Pest Control Practitioners	2	3.32	1.89	1	7
Baer	Safeguarding Bees from Pesticide Exposure	3	3.53	1.9	1	7
Eskalen	IPM for Control of Grapevine Trunk Diseases	4	3.68	1.72	1	7
Anderson	Urban IPM Apprenticeship Program	5	3.89	1.85	1	8
Gamez	Precision-Guided Sterile Insect Technology (pgSIT) for Navel Orangeworm Pests	6	5.37	2.03	1	8

Senf	IPM on Fallow Fields and Unused Field-edges	7	5.68	1.62	2	8
Trask	Reducing Impacts from Urban Pesticides	8	7	1.45	4	8

Quorum Count

Aimee Norman, DPR Integrated Pest Management (IPM) Branch Chief, initiated roll call to verify PMAC member attendance achieved quorum, in accordance with the state’s Bagley-Keene Open Meeting Act. The following PMAC Member recusals were announced:

- Hanna Kahl has a conflict of interest with the Baumgartner Proposal and will recuse from all proposals.
- Karey Windbiel-Rojas has a conflict of interest with the Anderson and Mehta proposals and will recuse from those two proposals.

Ms. Norman noted that 4 members were being represented by their alternates:

- Brian Gress for Karen Ross
- Siavash Taravati for Brenna Aegerter
- Thomas Getts for Whitney Brim-DeForest
- Eric Stein for Renee Pinel

Ms. Norman noted that the three Ex Officio members present do not count toward quorum and affirmed that quorum had been attained. See above for the attendance list.

4. Alliance Grant Proposal Discussion

The facilitator, Ariel Ambruster from the Consensus and Collaboration Program at California State University, Sacramento, outlined the process for proposal discussion and review and noted that the role of PMAC is to provide recommendations and feedback helpful to inform Director Henderson’s funding decisions.

First, PMAC members discussed whether there was an obvious bright line separating out proposals they’d recommend not funding. PMAC members were in consensus that they would not recommend the Trask proposal for funding.

Discussion of Proposals

PMAC members discussed the merits, concerns, and areas needing clarification for each project proposal, in the order of their initial ranking. Below is a summary of PMAC members’ comments for each proposal. Comments reflect individual PMAC member observations, not consensus opinions. Thus, merits and concerns may occasionally appear to be contradictory.

Mehta – IPM Model for Affordable Housing

Merits

- The proposal is robust and well organized – it was easy to find all necessary information in the application.
- The application is well written.
- A strong team of researchers and pest-control experts would lead the work.

- The proposal seeks to achieve important goals, with the focus on infestations in low-income housing.
- It fits with the IPM concept and Alliance Grant program mission.
- This work could be a statewide model for addressing a big issue with lessons for other urban areas.
- The approach is in line with DPR's environmental justice goals and its mission to protect human health.
- The training and metrics for evaluating and measuring success were well developed and speak to the longevity and applicability of the work for other groups trying to do something similar.

Concerns

- The proposal does not address how to eliminate cockroaches in non-accessible areas such as behind cabinets – pesticides would have to be used.

Clarifications

- None.

Public Comment

- None.

Baumgartner – Sustainable PM Trainings

Merits

- Getting PCAs more educational awareness of IPM is important.
- This very strong proposal has an excellent alliance team of the right people, including working with University of California (UC) Agricultural and Natural Resources (ANR) to reach growers and Pest Control Advisors (PCA).
- The approach has a broad focus on pesticides and is also targeted to those making decisions. It is balanced and seems to have a high chance of success.
- The training plan, including the number of field days, the large target audience, and the paid internship program for students, seems effective.
- The multi-pronged training approach includes multilocation field days and online media.
- The approach involves layering with many different agencies and involvement of UC and other organizations.
- It has strong letters of support.

Concerns

- The proposal is too broad geographically and with multiple crops to be impactful and needs to be more focused. It would be better to focus on one region or a group of crops.
- It does have the right people, but it would be more effective if applicants chose one region to focus on.
- The Sustainable Pest Management Roadmap is a systemic approach. The applicant should think more about how to take a systemic approach that goes beyond existing IPM practices.

- There was no mention of working with commodities groups like almond growers and no letters of support from grower groups.
- The online tool is not well thought through, there are already online tools, and there needs to be a way to maintain them. There really needs to be a tool that pulls information from multiple sources and supports decision-making, not just monitoring.
- The proposal lacks specificity on objectives, content, training and field day topics, and economic benefits and feasibility.
- There are already a lot of existing networks, and the proposal does not make clear what the incentive would be for PCAs to participate in the online peer network
- Everyone is doing sustainability for PCA education – this is not a new thing.
- An approach needs to have buy in by processors to get buy in from growers – there has to be an incentive to change.
- The approach is too big and messy, trying to cover too many areas. It is too cumbersome for PCAs to deal with. Growers listen to farm advisors and PCAs, more than to some video.
- The proposal seems to be based on opinions and not hard data to show what the need for it is.

Clarifications

- None.

Public Comment

- None.

Baer – Safeguarding California’s Honey Bees

Merits

- This seems like an excellent program for safeguarding bees and bee safety. It continues and expands current program and benefits current research. It addresses communication to try to protect natural pollinators from pesticide drift.
- Multiple PMAC members said the proposal shows a good alliance, with support and strong letters from a broad array of stakeholders.
- The proposal is well put together.
- There is a good outreach approach.
- This seemed like the best IPM program. Honey bees are threatened everywhere, one third of edible crops are pollinated by honey bees. With the parasite, disease and pesticide issues we are noting, this should be a top priority proposal.
- It would involve clinical documentation of exposure. That could help build perspective on what really matters on these exposures and help guide future IPM.
- It is very focused to Southern California – they could accomplish a lot with a geographically focused effort.
- It builds upon existing tools such as BeeWhere, taking the next step.
- While the proposal is not traditional IPM, exclusion is part of IPM and this is close to exclusion work – it does not aim to reduce pesticide use, but to prevent bees from exposure.

Concerns

- Multiple PMAC members questioned whether the proposal aligns with the mission and goals of the grant program to expand and demonstrate IPM.
 - If they were doing outreach on how to manage pests in beehives with safer or no pesticides, then I could understand it being part of the grant program mission. But this looks to be about testing hives after pesticide impacts to help better understand if issues with honey bees are due to pesticides or other factors.
 - This doesn't seem to fit into the alliance grant framework – it is an important topic, but not really IPM focusing on reducing pesticide use.
- The approach has the potential to spread misinformation about the impact of pesticides, as showing presence of pesticides in bees does not indicate causality. There has to be a mechanism to look into it further and provide expert analysis to interpret the results.
- Along with the issues of alignment with IPM and potential misinformation, there is a lack of full development of the approach.
- There is a very similar program (BeeWhere), but based on the proposal, it is not an effective platform, as exposures still happen. If BeeWhere is not working, how do we know that a similar platform or system will work?
 - Another PMAC member disagreed, saying BeeWhere is successful in establishing an automated system where beekeepers register and get alerts and establishing a communication link between them and PCAs and growers. BeeWhere has helped PCAs and growers know where hives are and alert beekeepers to potential exposure.
- Multiple PMAC members discussed how effective the approach would be in protecting bees.
 - They don't have a set of recommendations in place for what other beekeepers should do for protection if there is a nearby exposure.
 - The issue is, how much can you move or cover hives to protect them? The interventions are all after the fact.
 - The time sequence is concerning – there is a pesticide application, then impact to hives, and then a report of the exposure incident. I'm not convinced there is sufficient time for other beekeepers to do anything about it.
 - There is a logistical set of problems of making practical use of pesticide exposure reports – how would beekeepers pack up their bees quickly? Possibly the reports may be useful in identifying long term, repetitive problems.
 - Other PMAC members with knowledge of beekeeping or entomology offered their thoughts.
 - One member said it is a common practice to move hives in response to pesticide applications and not too difficult to move smaller hive operations. If you move soon, you can prevent bees from dying or use entrance blockers to prevent bees from getting out and thus reduce their exposure. Beekeepers closer to the spray experience losses and can help others further away.

- Another said commercial beekeepers, such as those in the almond sector, have more limited mobility or mitigating options than backyard beekeepers do.
- What is the connection between the BeeWhere and the proposed BeeALERT systems? I would like to see greater integration of the two systems rather than there being two separate systems.
 - Another PMAC member agreed and said this seems like a missed opportunity to integrate with the expensive, well-developed statewide pesticide notification system. How will this be better than the existing program and how would it integrate with existing CDPR notification systems?
- A PMAC member posed a question for entomologists in the meeting: Could the diagnostics be valuable in guiding future IPM and regulations on insecticide toxicity?
 - A PMAC member entomologist responded that tech and methodology are always improving so that this proposal does have the potential to add to that body of knowledge.
- A PMAC member noted a procedural issue: the proposal did not follow the grant program’s proposal page number limitations. Is that fair to other applicants who did adhere to the page limit requirements?
 - Leslie Talpasanu, DPR Grant Program Manager, later shared direction from the DPR’s legal team directing PMAC members not consider this issue or discount a proposal on page limit issues, as it is not part of their proposal review criteria or DPR’s eligibility requirements for proposals – so there is some wiggle room regarding the page limitation.

Clarifications

- None.

Public Comment

- None.

Eskalen – IPM for Grapevine Trunk Diseases

Merits

- The demonstration and field days, integration of double pruning, avoiding rainy periods, and using biologically-based pesticides for protecting pruning wounds are strong elements of this proposal.
- This is an important problem to address – trunk diseases are the biggest impact on wine and table grapes in California and there are limited effective responses. This is a big deal for the grape sector.
- The proposal is well-designed.
- The proposal has strong support letters.
- This can be an effective approach – Trichodermas used in this approach can work better than conventional pesticides in protecting pruning wounds.
- They look to alternatives to classic pesticides, with possible lessons learned here for other commodities, such as the citrus industry. It may not apply to all commodities right

away but will contribute to that body of knowledge and may help down the road. Some of this research helps reduce risk adversity, the potential financial risk to growers in switching tools.

- The outreach plan is strong – more than some of the other proposals, the proponents gave a lot of detail on how they will conduct outreach.

Concerns

- Multiple PMAC members questioned if the private sector, the industry, should be funding this type of work.
 - In agreeing on the concern about public funds paying for proprietary product development, another PMAC member noted that quite a bit of the funds would be allocated to purchase equipment for the private company.
- Similarly, multiple PMAC members were concerned that two-thirds of the funding would go to a subcontractor to do research and development (R&D) on formulating a new pesticide product. The other aspect of the project is an outreach component regarding existing biocontrol tools. How would that R&D work fit in to the mission of the Alliance Grant Program?
- A major concern, a red flag, was the applicant’s intention to label their new product as a “fertilizer” to get around regulatory hurdles.
- The work emphasizes the Bacillus, while research indicates the existing Trichoderma biocontrol is equally or more effective.

Clarifications

- None.

Public Comment

- None.

Anderson – Urban IPM Apprenticeship

Merits

- Multiple PMAC members praised the proposal’s focus on an interesting “train the trainer” approach, saying the apprenticeship approach can be a very effective way to transfer information down. Most agricultural PCAs have college field checkers and that is very effective for learning.
- There is significant need for work in urban IPM focused in high density areas. It would be helpful to train more urban IPM leaders in order to promote IPM in the structural pest control field as it is so far behind agricultural IPM.
 - Another PMAC member disagreed with the characterization of IPM in structural pest control industry, having helped develop three outside certifications and done work in water quality and with certain pesticides. They welcomed continuing IPM advancements in the sector.
- The budget is on-point – it is affordable in terms of the potential for the effectiveness of this approach vs. the dollars being asked for.
- The proposal includes a strong outreach plan that will reach many people.

- While the project would be run by an out-of-state entity, it seems like the benefit will be to the state's IPM and urban areas.

Concerns

- The program would only train nine people, which seems like a drop in the bucket.
- The approach involves only non-Proposition 65 category pesticides, and it is doubtful if they can address all pest issues with those products. The proposal needed more detail to address that question and discuss alternatives, as the Mehta proposal did.
- How well would this program be integrated with the existing outreach people and programs?
- The project would be run from Wisconsin, which might not work well.
- California dollars should stay in California.
 - Ms. Talpasanu of DPR later shared that the grants program does not have any restrictions on out-of-state proposals, but does not allow funding to go to travel out of California. In response to a question, she clarified that the grant funds cannot pay for an outside entity to travel to or from California, and DPR works with the grantee to ensure they pay for their own out-of-state travel.
- If a project is out-of-state, it is helpful to see a local connection. There are no academic letters from UC or indication of local buy-in.
 - Another PMAC member responded there are three UC IPM members involved directly in the project (a PMAC member recused from speaking about the proposal is one of them).
 - The first speaker said they feel better knowing that.

Clarifications

- None.

Public Comment

- None.

Gamez – Controlling NOW with pgSIT

Merits

- This is the most modern science and is very interesting technology, to control navel orangeworm with this, is pretty exciting IPM.
- In response to a question from one PMAC member about the value and applicability of this work to other crops, another PMAC member said the SIT technology is relevant to other crops and has been applied to other pests. This specific work on navel orangeworm could be applicable to almond, pistachio, and possibly walnut crops.
- This is a novel SIT approach to fundamentally change pest management away from pesticides, so it is very interesting.
- This is a very significant pest, with few approaches to address it.
- This is an important tool to explore.
- Almonds are a huge commodity for California and anything to address that crop is encouraged.

Concerns

- There were no letters from California stakeholders. Is there enough collaboration within California? Where is the industry on this?
 - The almond/pistachio sector has been looking into SIT for the past 6 to 7 years. There has been work looking at releasing male pink bollworm, with questions about its efficacy after several years of research. The question is looking at newer technology and putting out pupa or larvae rather than adults, which is a different method of release and more likely to work. A lot of funding from the nut sector has gone into this research, but not with this company. A lot of UC researchers could assess efficiency but there has been no effort to include UC. The idea is good, but the implementation is not there.
 - Another PMAC member agreed about the limited collaboration with California researchers are pest management experts – there are no boots on the ground.
- The proposal is high-risk and too risky, because there is no data on the feasibility and efficacy of this approach on the navel orangeworm. The applicants are asking for a lot of money and are just assuming it will work in the lab and in the field.
 - Another PMAC member said the proponents still need to do a lot of development – they are still identifying the molecular targets and are too far away from implementation.
- This is not a good fit for the Alliance Grant Program, as it is focused on research.
 - Another PMAC member said they had highly ranked the proposal, and would encourage the applicants to consider PMAC feedback and restructure their proposal to resubmit for research grant funding.
 - A PMAC member asked how the PMAC should address hybrid alliance/research proposals.
 - In response, Ms. Talpasanu said one of the criteria for PMAC to consider is whether proposals are a fit for the program.
- The proposal doesn't address the regulatory hurdles that would have to be surmounted.

Clarifications

- None.

Public Comment

- None.

Senf – IPM on Fallow Fields

Merits

- The proposal is taking a different angle by preventing a pest problem, preventing invasives from gaining a foothold in agricultural fallow fields and wildlands, which is a major undertaking.
- The focus on A-rated invasive weeds and working with landowners seems good.
- It is a very local small project, but will generate learning applicable to other areas of the state.
- The PDF IPM planning guide could be shared more broadly, so the impact could extend

- far outside Scotts Valley.
- It focuses on an underserved remote area that often doesn't get assistance.
- The budget is very affordable.
- From a diversification aspect, this is the only proposal focused on weeds, which is an important area.
- Weeds can significantly impact biodiversity and landscape quality of range and natural lands, so the impact of eradication and prevention can be much more significant than the impact to agricultural lands.

Concerns

- It is an IPM project but uses a lot of chemicals.
 - Another PMAC member said that pesticides are not excluded from IPM programs.
- There were concerns about whether those doing the work had enough experience with weed management.
- How impactful would the alliance work be, given the very small geographic area covered? The application did not say that the outreach guide would be shared out to extend benefits to other parts of the state.
- It looked as if the work would be done on field margins rather than fallow fields.
- The estimate of 2-5% reduction in pesticide use seems to be too low.
- The application was not well put together. It was hard to find information, and certain areas were not clear, such as the discussion on empowering local people. It lacked sufficient information on economic feasibility and benefits, delivery dates, and the outreach plan.

Clarifications

- One PMAC member asked if the heavy rains this winter could impact implementation of the project.
 - Another PMAC member said that this part of the state is still abnormally dry and nearby areas are not getting their full water allocation.
- A PMAC member said it was not clear whether the work would be done for the County or the RCD.

Public Comment

- None.

Trask – Reducing High-Risk Urban Pesticide Impacts

Merits

- It addresses a major problem, urban pesticide runoff, and includes commercial and urban applications.
- It is intriguing in making use of an existing research station that allows simulation of impacts.
- It is a very well-qualified group with a good reputation targeting an important issue, the movement of pesticides.

Concerns

- Much of the proposal focuses on research, and we already have a lot of data on pesticide runoff in California regarding two of the three ingredients to be studied, so it would not add much information.
 - Another PMAC member encouraged the applicant to refocus the work based on PMAC member comments and after coordinating with those who have already undertaken research, as there is more information needed regarding adjusting application techniques or the movement of pesticides.
- The proposal is asking for significant funding.
- While the applicant is on the east coast, the facility in Porterville (managed by Research For Hire) is an agricultural facility, versus a facility simulating urban conditions.
 - Another PMAC member agreed that the facility description was confusing. Because it consists of walls and structures, it should be able to replicate urban situations of pesticide runoff.
- The application did not have much detail and was vague and confusing in places. For example, regarding the description of outreach, both DPR licensees and homeowners were mentioned as far as target audiences. Some PMAC members were not sure about the proposal's specific methods, if the work was to characterize runoff, or to assess different ways of applying or mitigating runoff.
- The proposal didn't seem to be strong enough or impactful enough for its very high price tag.
- The only letter of support is from the subcontractor.
- The goal of the project is to determine optimal application formulation. Developing pesticides is very costly and difficult. It seems like this should depend on the private manufacturing side, as what are the benefits to the state of California?

Clarifications

None.

Public Comment

- None.

5. Department Updates

Director Henderson shared the following DPR updates and highlights:

- In November, DPR announced proposed regulations to strengthen restrictions on 1,3-dichloropropene (1,3-D) use and address its potential risks to residents and non-occupational bystanders. A comment period on the regulations is open from May 9 to May 31, capped by a May 31 hybrid public hearing in Sacramento.
- DPR is working with the Office of Environmental Health Hazard Assessment (OEHHA) to develop regulations for 1,3-D risks to occupational bystanders.
- DPR is conducting an independent study of the mill assessment, its primary funding source, to identify options for the structure, sources and levels of funding necessary to

continue to protect people and the environment long-term. Draft recommendations were released on April 27 and a comment period on them runs through May 30. Final recommendations will be released in the summer.

- In January, DPR, the California Department of Food and Agriculture (CDFA), and the California Environmental Protection Agency (CalEPA) released the Sustainable Pest Management Roadmap for California, available in English and Spanish on DPR's website. DPR is very excited about the Roadmap – we appreciate Karey, Gabriele and other PMAC members' participation on the Roadmap. DPR is engaging with stakeholders to gather feedback on implementing the Roadmap:
 - DPR received nearly 5,000 responses from a 45-day public comment period earlier this year and will share a summary on the Department's Sustainable Pest Management web page;
 - DPR hosted English and Spanish public webinars on the Roadmap recommendations; and
 - Plan to meet with a variety of stakeholders over the coming months to discuss priorities, opportunities and challenges for Roadmap implementation.
- On April 6, DPR released the 2021 Pesticide Use Report and added its data to the CalPIP online query tool. The report shows a 10% statewide decline in pesticide use compared to 2020.
- On April 10, the state Office of Administrative Law approved regulatory control measures to protect pollinator health as identified in the California Neonicotinoid Risk Determination and Addendum to the July 2018 California Neonicotinoid Risk Determination. Those measures are specific to crop group and consist of application method and rate restrictions, application timing restrictions, and seasonal application rate caps for a number of different neonics. DPR has started evaluating risks of non-agricultural uses of neonics.

Jordan Weibel, Research Grants Program Lead, gave an update on Director Henderson's selection of this year's research grants. DPR was able to fund seven projects, and are excited about the diversity of those funded. There is a lot of consistency between the PMAC and the DPR internal rankings. He thanked PMAC members for their participation in rankings and recommendations – it is incredibly helpful to DPR's work.

The projects, in alphabetical order of Principle Investigator:

- Bolton – Canine Detection of Invasive Vine Mealybugs and Leafroll Virus in California Vineyards
- Jin – Controlling Grape Pierce's Disease (PD) and Citrus Huanglongbing (HLB) and their Transmission Vectors Using a Stable Plant-Derived Antimicrobial Peptide
- Larbi – Development of a Remote Nozzle Selector for Increased Productivity and Reduced Operator Exposure to Pesticides
- Rugman-Jones – Can the Sterile Insect Technique [SIT] Provide an Alternative to Pesticides for Controlling the Spread of a Major Pest of Citrus, the Asian Citrus Psyllid (ACP), in California?

- Swett – Reducing Current and Future Fungicide Use in California Crops by Providing Decision Support and Rotation Tools for Managing the Emerging, Highly Damaging *Fusarium falciforme* Pathosystem
- Westphal – Soil Suppressiveness Against *Pratylenchus vulnus*, One of the Key Foes of Almond Production
- Wildermuth – Formulation and Field Testing of RNA-Based Biological Control Product for Grapevine Powdery Mildew

PMAC Member’s Comments and Questions

In response to a question, Mr. Weibel said funded applicants were notified that week and an announcement will soon be released.

A PMAC member noted that DPR ended up funding PMAC’s top four ranked proposals, as well as those three ranked lowest, and whether DPR could help inform PMAC members about anything additional they should pay attention to, so that the advisory group is able to get DPR what it needs.

In response, Mr. Weibel noted that the final results evenly weight PMAC and DPR staff recommendations, and said DPR appreciate the stakeholder perspective. Internal reviews are focused more on budget and how the proposal is put together.

Aimee Norman agreed, saying the purpose of PMAC is to be an external stakeholder committee, not to parrot the DPR perspectives. When recommendations diverge, it does not mean there is anything wrong, on either side. The whole point of forming a PMAC was because DPR wanted a multitude of voices to be heard.

The PMAC member said this was helpful.

Another PMAC member said it would be helpful at the next PMAC meeting if DPR could provide an overview of how staff evaluate proposals, so PMAC understands how the other 50% works.

In response, Ms. Norman said staff use the same criteria, but just as with PMAC members, they have different perspectives. They will work on sharing more about DPR’s review process.

Process discussion/questions

A PMAC member asked if DPR can partially fund a project, if they like a portion of a multi-pronged project – their organization negotiates with the researchers it funds. In response, Ms. Norman said they would consult with DPR’s legal team and follow up.

6. Decision on Recommendations

Based on their discussion, PMAC members re-ranked the proposals.

Quorum was confirmed and DPR staff presented the combined re-rankings. Re-rankings are shown in the table below. With 17 PMAC members submitting re-rankings, the overall ranking order saw changes in mid-ranked proposals, with the Eskalen grapevine trunk disease, Anderson urban apprenticeship and Senf weed prevention proposals each moving up one rank and two other proposals moving to lower ranks.

2023 Alliance Grants Program Final PMAC Proposal Rankings (average of 17 rankers)

Principal Investigator	Project Short Title	Final Ranking	Initial Ranking	Average Rank	Standard Deviation	High	Low
Mehta	IPM Model for Affordable Housing	1	1	1.47	1.09	1	5
Baumgartner	SPM Training for Pest Control Practitioners	2	2	3.31	1.69	1	7
Eskalen	IPM for Control of Grapevine Trunk Diseases	3	4	3.81	1.47	1	6
Anderson	Urban IPM Apprenticeship Program	4	5	3.87	1.89	1	6
Baer	Safeguarding Bees from Pesticide Exposure	5	3	4.19	1.18	2	8
Senf	IPM on Fallow Fields and Unused Field-edges	6	7	5.19	1.84	2	7
Gamez	Precision-Guided Sterile Insect Technology (pgSIT) for Navel Orangeworm Pests	7	6	5.94	1.48	2	7
Trask	Reducing Impacts from Urban Pesticides	8	8	7.63	1.05	4	8

A PMAC member suggested that the group submit the rankings to Director Henderson with their input. This set of Alliance Grant proposals was not the strongest batch, and perhaps the DPR might not expend all of the current funding, and only fund the very best of the proposals.

A new PMAC member shared they found the process very useful, as the discussion changed their mind on the proposals.

Another mentioned that the standard deviation has gone way down, indicating the rise in level of agreement.

Two PMAC members agreed that this round of proposals didn't seem to have as many strong candidates. One hopes DPR has some flexibility in selecting portions of a proposal. The other PMAC member agreed that holding back some of the funding could be helpful, considering only \$400,000 would be available next year for Alliance Grants.

Another PMAC member gave a reminder to applicants that with Alliance Grants, there needs to be an alliance. That means conducting broad outreach with in-state resources, and letters of support from industry – not just from those working on the project – the applicant needs to show that the commodity or stakeholder group is involved.

A final opportunity for public comment was offered prior to PMAC members beginning a roll call vote on their recommendations. There was none.

The PMAC took a roll call vote on the following proposal:

That the PMAC submit the final rankings with comments on proposals, with a note that if the DPR can hold back some of the funding this year, that may be important for funding stronger proposals in the future.

The recommendation was adopted with unanimous consensus, with 19 supporting and none opposed, carried with the necessary quorum.

Aimee Norman thanked the PMAC for their robust discussion and all of their feedback.

7. Closing Remarks

Director Henderson thanked PMAC members for their interest, commitment, and willingness to volunteer for this important work. She appreciated the discussion about the relative strength of the proposals, and asked them for ideas on how to strengthen proposals next time, how to outreach to bolster alliance and research grant applications.

Director Henderson also emphasized the importance of PMAC's work in relation to the Sustainable Pesticide Management and the Roadmap, thanking those PMAC members who worked to develop the Roadmap: Jenny Broome, Jim Farrar, Gabriele Ludwig, Margaret Reeves, Dave Tamayo and Karey Windbiel-Rojas. She extended an invitation to all PMAC members to work with DPR on implementation.

The next PMAC meeting will take place on August 10, 2023.