



AGRICULTURAL SUSTAINABILITY INSTITUTE AT UC DAVIS (ASI)

EXTERNAL ADVISORY BOARD ANNUAL MEETING

UC DAVIS, CA

NOVEMBER 10, 2015

MEETING REPORT

Prepared by: Courtney Riggle



Summary

“Creative Abrasion” was the theme running through the eighth annual meeting of the Agricultural Sustainability Institute’s (ASI) External Advisory Board (EAB), held November 10, 2015 in Davis, California. The meeting was attended by fourteen external advisory board members, 27 ASI staff and faculty members, and nine guests. It was chaired by board chair Howard-Yana Shapiro.

Our invitation

Be creative, candid, challenging

“Creative abrasion”: we don’t have to agree on everything!

Always: respect everyone and all ideas

Overall meeting objectives were to:

- a) Introduce Board members, ASI staff, and observers and strengthen relationships among all participants.
- b) Engage Board members and observers to share their advice and perspectives as we continue to develop ASI’s programs.
- c) Update Board members on accomplishments, opportunities and challenges so that Board members are able to be advocates for ASI.
- d) Seek board members’ advice on framing our “Big Ideas” for the next major UC Davis philanthropic campaign: Russell Ranch/Living Laboratory for Resilient Agriculture and Student Farm/Sustainable Living and Learning Communities.
- e) Identify specific opportunities for Board members to be more actively involved in our fundraising over the next year.

The convening was held on the UC Davis campus this year, opening with introductions and reflections on the year, including a presentation on refocused UC ANR priorities by the division’s new Director and new EAB member, Glenda Humiston. This initial period was followed by a session on social equity concerns and discussion about how ASI can be more cognizant and better address these concerns throughout its programming—which was a direct follow to the 2014 EAB discussion opening the dialogue on this same topic. The remainder of the day was devoted to in-depth explorations and development of ASI’s “Big Ideas”, followed by a session with UC Davis administrators on how to negotiate that process. In addition, an unexpected cameo at lunchtime by a set of UC Davis SA&FS students kept participants on their toes: the students requested board member assistance with averting the closure of a long-term research facility in Berkeley. The presentation contributed to some interesting discourse, as EAB member response to the request was varied.

All in all, ASI staff and board members remarked that the day felt extremely productive, with the time being both well-organized and well-spent. In particular, discussion during the “Big Idea” concept sessions provided insightful suggestions for improving the framing and presentation of the ideas, suggestions that staff are pleased to incorporate as both concepts are submitted for inclusion in the overarching “Big Ideas” process.

The remainder of this report will review meeting highlights and discussions.

Participants



External Advisory Board: Andrew Baskin, Renata Brillinger, Helene Dillard, Kelly Gravuer, Amrith Gunasekara (for Karen Ross), Martha Guzman-Aceves, Andrea Henderson (for Puon Penn), Glenda Humiston, Carl Johnson, Joann Lo, Marshall McKay, David Meddaugh (for Corny Gallagher), Howard Shapiro, Tom Turini

Guests: Audy Bell, Susan Clark, Shaun Keister, Bob Medearis, Bob Murphy, Paul Prokop, Kathleen Socolofsky, Kat Taylor, Maggie Thomas

ASI Faculty/Staff/Affiliates: Sonja Brodt, Dave Campbell, Shosha Capps, Mariah Coley, Gwenael Engelskirchen, Gail Feenstra, Joanna Friesner, Amélie Gaudin, Melissa Haworth, Carol Hillhouse, Allan Hollander, Patrick Huber, Ermias Kebreab, Maggie LaRochelle, Patrick Nolan, Jim Quinn, Bev Ransom, Courtney Riggle, Kate Scow, Dianne Stassi, Sara Tiffany, Tom Tomich, Emma Torbert, Mark Van Horn, Andrew Waterhouse, Aubrey White, Lina Yamashita

Chair's Welcome (Howard Shapiro)

Howard Shapiro opened ASI's 2015 External Advisory Board Meeting with the goal for the day put forward to embark on a day of "creative abrasion", inviting participants to dig into the discussions and create friction between ideas we have, ideas we want, and yet maintain a discussion where everyone is respected. He reflected that 10 years ago, when ASI was being created, people were not able to have a serious conversation about sustainable agriculture. We are now able to collectively talk about this topic and the complexity of the future. We used to think it was fraught with danger, now we see it as open to possibilities.

3 main pillars of ASI:

1. Productivity and profitability – solutions need to address these pieces to work, not relying on price supports.

2. Environmental and ecological issues – solutions are lost without these pieces. ASI's focus on sustainability uniquely positions it to have the tough conversations.
3. Social and cultural – deep issues and roots for ag sustainability. An individual company/institute/organization can't work in isolation. Needs uncommon collaboration: who can you work with that you've never worked with before?

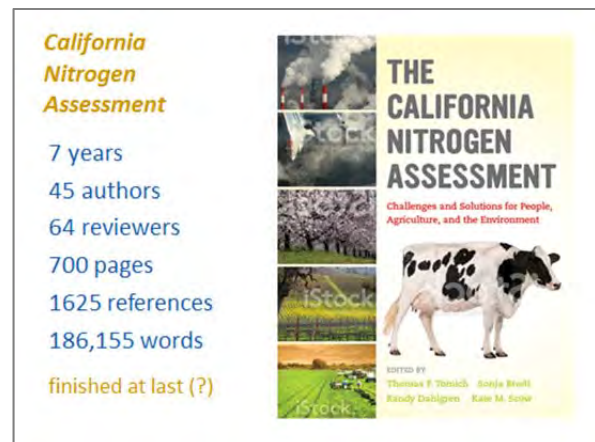
It was noted that the University's primary goal is Discovery, whereas ASI's is Translation, with a dire need to promote the Scaling Up of solutions.

ASI is system of change locally, statewide (via SAREP), and nationally; part of our responsibility long-term is also globally. For example: California is the breadbasket for the United States. California doesn't have a water problem—the United States has a water problem. Growing our ability to translate and communicate solutions across scales is critical.

Director's Update (Tom Tomich):

ASI's "Top Ten" for 2015:

1. California Nitrogen Assessment:
 - First comprehensive statewide nitrogen assessment book "in press" (UC Press to be exact)
2. Sustainable Sourcing of Agricultural Raw Materials:
 - New unit, led by Jim Quinn, to manage growth in activities (SACOG funding for landscape assessments), partnerships (ETH Zurich, UN FAO, Barilla), staffing (informatics, spatial analysis)
3. Student Farm:
 - "Fresh Focus," a program that supplies Student Farm produce to the UC Davis Food Pantry, created by undergraduates Kiko Barr and Nicole Lesnett working with Student Farm staff
4. Russell Ranch Sustainable Agriculture Facility / Century Experiment:
 - New instrumentation for monitoring water and temperature, including NASA JPL sensor towers, makes Russell Ranch the place to see "the future of agriculture" (quote from a visitor)
5. SAREP support for small-scale, beginning, and underserved farmers:
 - First Youth-led Urban Ag Tour, building on SAREP's ongoing business development programs
6. SAREP greenhouse gas and energy footprinting (LCAs):
 - GHG reduction opportunities for 8 commodities; almond LCA received great media attention
7. SAREP Solution Center for Nutrient Management:
 - Nutrient management research database launched and growing in size each week
8. Agroecology Professorship: **\$1 million endowment campaign goal reached!**
9. Competitive grants: \$1 million annual target reached (after only four months)
10. Website: New website launched in September; at about 160,000 visitors last year, previous version was the most visited website within CA&ES (second only to the CA&ES website itself, at 200 K visitors)



ASI's Top Ten: Five year period from 2010 to 2015

1. Sustainable Agriculture & Food Systems bachelor of science:
 - Grew from 10 students at launch in 2011 to >100 in Fall 2014
2. Student Farm:
 - Over 2000 college students engaged, ~15k children experienced learning at the farm
3. Century Experiment:
 - 23 years of climate, soil, agricultural production data available for open access online
4. Russell Ranch Sustainable Agriculture Facility:
 - Producing data for development of next generation of innovations linking agriculture with IT (including NASA sensors)
5. California Nitrogen Assessment:
 - First comprehensive statewide nitrogen assessment at a pivotal time for state policy
6. Greenhouse gas and energy footprinting (LCAs):
 - Identifying key opportunities for reducing GHG emissions in the production and supply chains of 8 commodities including almonds, walnuts, and processing tomatoes
7. Solution Center for Nutrient Management:
 - New extension prototype to stimulate innovation with the CA agricultural community
8. Support for small-scale, beginning, and underserved farmers:
 - Connecting farmers to new values-based markets and business development opportunities
9. Inter-Institutional Network for Food, Agriculture, and Sustainability:
 - Shaping national academic debate on racial equity in the food system
10. Sustainable Sourcing of Agricultural Raw Materials:
 - Publically-licensed "checklist generator" tool to cut through the complexity inherent in sustainability



PRESENTATIONS & DISCUSSION

UC Agriculture and Natural Resources (ANR) / Sustainable Agriculture Research and Education Program (SAREP) Vision

(Glenda Humiston, Vice President, UC ANR)



ANR Vice President Glenda Humiston introduced her vision for how ANR can collaborate more effectively, with a goal to facilitate interactions among its county-based extension, statewide programs, research extension centers, and academic specialists on campus with a broader set of collaborators around the state. She emphasized that the concept of synergy is critical.

A few different questions and approaches were highlighted, representing both ANR and other actors:

1. Looking at value chains: where are missing links? (current understanding is pretty linear)
 - a. Discussion: *ASI has expertise in helping local groups understand /map out value chains*
2. Central valley AgPLUS – a proposal that 4 CV regions put together for White House, re: regional manufacturing hub (only one concerns food/bev)
 - a. ANR/UC needs to become involved
 - b. Effort ties together labor, finance, etc-comprehensive strategy
 - c. Provides a potential model for regional synergy?
3. ANR recently joined University Economic Development Association
 - a. CA state economics summit
4. **Messaging is very important** – eg: ag/food needs to be highlighted, not buried
 - a. Working landscapes action team added
 - b. Community college/research report monitoring job trends
5. Rural-Urban Connections Strategy (RUCS program), Sacramento Area Council of Governments (SACOG)
 - a. Maggie Kelley – helping expand RUCS statewide
6. Labor availability – shrinking dramatically in CA; but ag also changing technology/reducing needs
7. Human, knowledge, social capital – leveraging these hidden capitals is important

She closed by emphasizing that it is critical for ANR to better communicate activities going on as part of the ongoing statewide conversations, including the importance of agriculture and natural resources, especially regarding ecosystem services provided by working landscapes.

Addressing Social Justice/Racial Equity at ASI

(Joann Lo, Co-Director, Food Chain Workers Alliance, & Sonja Brodt, ASI/SAREP)

From last year, the EAB was interested in seeing better data/more examples of racial/other impacts of structural inequities. Some examples include:

- Child hunger a function of broader food insecurity
- Access to grocery stores and supermarkets
- Food system is largest employer 1/6 jobs; 1/5 private sector job
 - Workers of color earn less
- Own survey
 - Wage theft – very inequitable
- Variety of policy examples that have set or reinforced barriers
 - Structural racial inequity is often a cumulative result of intersecting policies & institutions


Suggests our focus needs to be on policies that look at structures and institutions.

Examples of Policies and Institutions that Have Created Structural Racial Inequities in the U.S. and in the Food System

- **1650 – Virginia legalizes slavery**, followed by Massachusetts and Connecticut
- **1862 – Homestead Act** passes, giving away millions of formerly Native American territory west of the Mississippi to mostly White Americans
- **1865 – President Johnson reverses Sherman’s Field Order 15**, ordering almost all plantation lands given to freed slaves be returned to the original plantation owners
- **1882 – Chinese Exclusion Act** passes, prohibiting immigration of Chinese laborers, most of whom worked in agriculture or railroads
- **1934 – Federal Housing Administration** created. Up to 1950, financed 3 out of 5 home purchases, but only 2% of FHA loans were made to non-white buyers.
- **1935 – National Labor Relations Act** passes – agricultural and domestic workers, who were mostly black, Mexican, and Asian, were excluded
- **1938 – Fair Labor Standards Act** passes – agricultural and domestic workers were excluded

Examples of Impacts of Structural Racial Inequities in the Food System

- Nearly 16 million children often to go to bed hungry = 1 in 6 White children, 1 in 4 Latino children, & 1 in 3 Black children*
- Low-income, urban neighborhoods of color have least availability of grocery stores and supermarkets compared with both low- & high-income white communities⁺



Americans Living in Communities With One or More Supermarkets


| Race | Percentage |
|-------|------------|
| Black | 8% |
| White | 31% |

Image source: "Racial and Ethnic Disparities in Obesity," Trust for America's Health & The Robert Wood Johnson Foundation

Source: * "Building the Case for Racial Equity in the Food System," Center for Social Innovation
** "Access to Healthy Food and Physical Activity: A Review of the Research," Paloutchian & Patel

Examples of Impacts of Structural Racial Inequities in the Food System

- On one Native American reservation in South Dakota, nearly 40 percent of families with young children experience hunger and food insecurity⁺
- 25% of Black families are food insecure, compared with 11% of White households.*



Source: * "Access to Healthy Food and Physical Activity: A Review of the Research," Paloutchian & Patel
** "Racial and Ethnic Disparities in Obesity," Trust for America's Health & The Robert Wood Johnson Foundation

Some options for integrating social equity considerations into all of ASI's work:

- 1) Choose projects on topics that **explicitly focus on social equity** concerns
Examples from **Food and Society**:
 - Youth-led urban ag tours
 - Enhancing market access for underserved farmers
- 2) **Re-design projects** focused on other topics, to more effectively take social equity considerations into account, including research and outreach in **Agriculture, Resources, and the Environment**

Key question: How can we embed social and racial equity as part of "big ideas"?

Discussion:

- Labor defines the food system, and is approached from a dehumanizing perspective.
- Would it make sense to broaden the discussion to think about power, distribution of power as part of social justice, political inclusion?
- Need to confront past injustices directly / be conscious and purposeful about that.
- As farm size grew in central valley - prosperity of every town declined. (Source: Goldschmann report)
 - Not just farm economy, but entire rural economy
- 7% of US children in US are stunted.
 - Q: What is this rate for farm worker children? (Answerable question...?)
 - Potentially partner with Center for Regional Change's – cumulative health impacts project / San Joaquin focus?
- Recognize that environmental regulation unintentionally creates more concentration of regulated output
 - Can incorporate greater contribution from end user of product
- Vulnerability is often in transitions; eg: tomatoes going to trees – effect on communities is immense;
 - Opportunity to assist transitions in ways that are better, or even another path?
- Approach is often missionary/charitable in focus. Need stakeholder engagement early on/partnerships instead.
 - Focus on building/empowering participation, instead of philanthropy.

- Openness in collaboration with other UCD departments, including the arts –as key elements of human growth.
- General economic concept: early adopters win, late adopters lose.
 - How to consider that fact in a social equity conversation, where the disenfranchised often have no access to early adoption/opportunities?

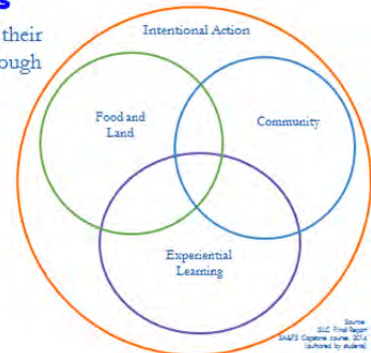
ASI Big Ideas

1. Student Farm/Sustainable Living and Learning Communities (Mark Van Horn & Carol Hillhouse)

UCD campus is going through revision of its long-range development plan. Sustainability is a significant part of that process. The area of Sustainable Living and Learning Communities (SLLC) is slated to be a neighborhood, and will be a cornerstone of UC Davis. The area will explore sustainability in the built environment, sustainable living and learning communities.

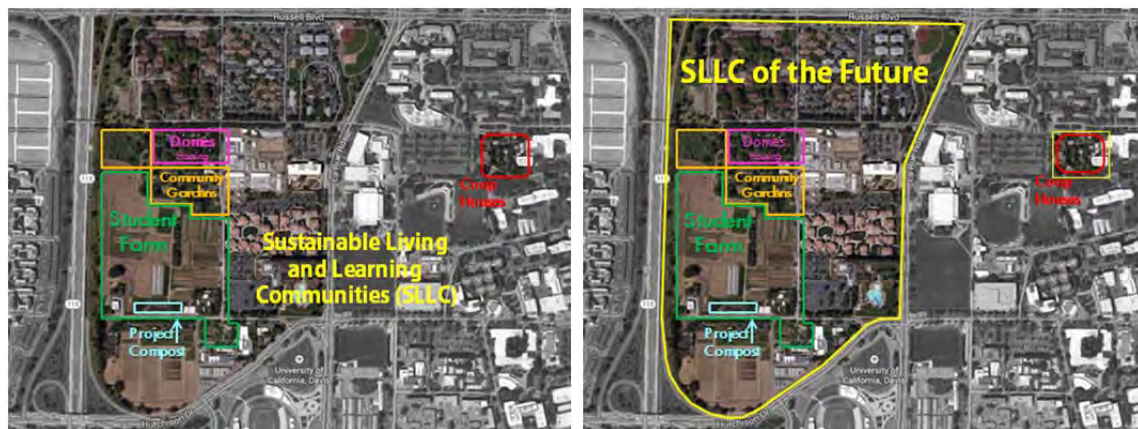
SLLC Values

Students co-create their environment through working, living, and learning.



Why SLLC? More and more students are committed to fostering sustainability. The best way to help them is to help foster knowledge and skill building. That requires direct experiential learning. Students are the key part of the SLLC design.

We have land, people, history, and commitment. What will success look like?



Discussion

Content and messaging:

- Needs a compelling message that something new or different will happen because of this proposal. What does the end look like? What do you really want it to BE? And who is going to give you money for this? What is it that needs to change that a philanthropist is going to put some money in to this?

- Why a short pitch? It needs to be thoughtful, compelling, has to have emotional hook. It's a sales proposition. I would think if you could find resources to assist in creating a professional video, you'd be better served. Need a better application into the broader community. Need to better build outreach into your project.
 - o Helpful to see students speak in the video. From their own voices...
- Showed early on impact beyond the program; need to better show how we are training in future leaders / problem solvers for tomorrow
 - o Goal: to solve the world's problem
 - o Goal: to train next generation of leaders
- End with visuals of problems on the table – that need to be solved.
- Offer them the opportunity to practice problem-solving for sustainability in any major, and the arts of democracy
- Make sure to acknowledge audience right away
- Establish case for need
 - o **Problem:** prepare people to become sustainability leaders
 - o **Solution:** experiential learning in both biophysical and governance, develop leadership
 - Students will have specific focuses, but some idea of how the whole operates
 - o Wasn't clear where we stand today and what's missing (current status), why do we want to get to it?
 - *Student farm (SF) has been successful in living and learning; will add built environmental and feedback loops*
 - o Need gauge of how many more students can bring in. Student farm maxed out, more students served
 - *SF 350-400 student per year now, could triple? But different type of engagement*
- **Biggest missing link:** Instead of images, make a slide – **aspirational**
 - o Quantitative impacts - # of students
 - o Qualitative impacts – intensification of learning, etc
- What is the core vision/message?
 - o Creating sustainable urban environment?
 - o Blending ag/food with urban env?
 - o Or is it Urban, rural neutral?
- *No photographs exist – need artist renditions?*
 - o Don't make it too... hippy? Need some additional images

History/challenge:

- Transformation on UCD campus from confrontation to embracing – challenge, as began with opposition
 - o How to keep on cutting edge, when no longer have enemies on campus?
by service learning/confronting specific challenges
 - o Also be continued experimentation
 - o Opportunity to include more on **social learning/social justice**
 - o “free tuition if figure out how to pay it forward” – support for future students
- Place where students place the vision, adapts over time
- Helpful to say students will help guide this
- Need institutional sanction – eg: from “let's take down Domes” to “let's build a sustainable community”
 - o This story is powerful

- What is the infrastructure on the table?
 - o How much influence does the EAB have?
 - o SAFS capstone class has been advising the vision/plan
 - o Food and farming system neighborhood?
 - Neighborhood is important concept
- Within UC, really nothing like this; some other examples to reference
 - o West village, is top down sustainability; new SLLC neighborhood is bottom up, constantly changing
 - Bridge between 2 systems
 - Living sustainably, vs living in a place that's sustainable
 - o Example to look at: Oberlin College – student design; One planet living = sustainable living (not buildings)
- “If you can’t solve the problem, make it bigger”
 - o Eg: Pilot for the full campus in sustainable living;
- Community, or communities?
 - o Danger of lumping too largely, becoming more top down
 - o Step beyond to how communities self-organize in world? Distributed systems for resilience and adaptation? Principle of resilience and sustainability that is thread in person’s life?
- Some state policy rolling out/programs “strategic growth council” – actively trying to figure out how to fund sustainable communities?
 - o Reflect statewide trend could also be powerful
 - o Food/transportation nexus – more links to innovative urban planning
- **Need:** An academic mechanism as the umbrella administrator for the neighborhood
 - o Keeping structure that allows student experimentation without too much oversight;
 - o Keeping it tied to academic mission of university is important
 - o Connection to Russell Ranch?: students go there for research and large scale, but not those connections not currently exploited as well as they could be.
 - o Consider the replicability of it. How can any of our other 10 campuses do this; how can this be a replicable model?
- **Need:** Staff person to work with campus (Bob) for 2 years on design, could help design the whole thing...
 - o Design firm to work with us pro-bono?

Experiential learning:

- Experiential learning Product = problem-solvers at the end of the day?
- How to articulate mentoring part of learning experience?
- Completely student driven?
- To have sustainable futures in any situation, is uncommon collaborations – experiential learning and integrated design, creates leaders for ag and problems in the future, but moreover, societies that can collaborate. “Living laboratory of human beings”
 - o “training in uncommon collaborations”

Participation and translation:

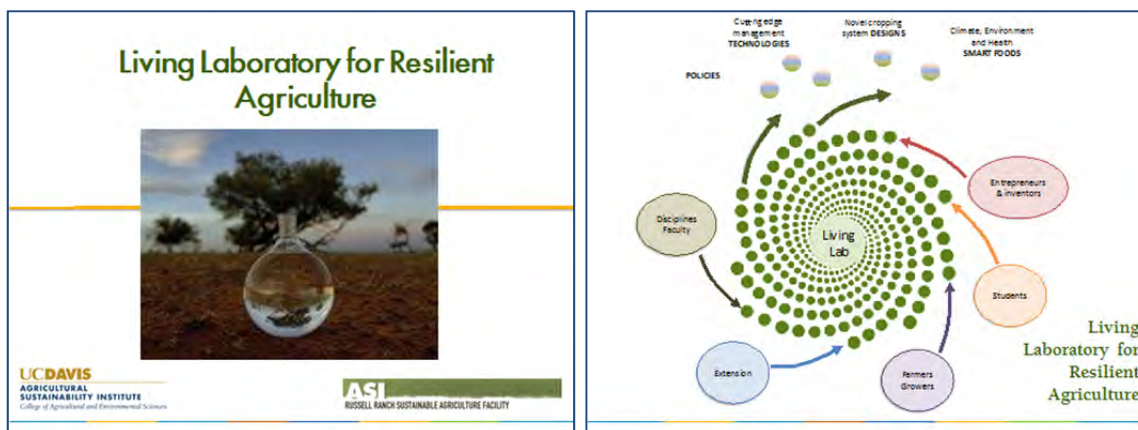
- **Translation and messaging:** It’s important to focus on those students who are able to participate, but there needs to be a component for how what they learn can translate to those who aren’t able to participate. How does it move outwards?

- **Social and racial equity:** What kinds of students will be attracted? Would be compelling to some funders to specifically recruit students of color, LGBTQ student, veterans, etc. Maybe set some targets for what % of those types of students you see involved? Who else can you partner with that will make it more successful?
 - o Emerging Leaders in Policy and Public Service, a project just started by the Chancellor, should tie into that group.

Specific focus areas to consider:

- Sending students out into world BEFORE you graduate – **service learning program**
- SLLC including access to a **commercial kitchen**/commercial kitchen incubator potential for bridging to specialty food industry
 - o Challenge: some kind of professional oversight needed to address food safety issues
 - o In general, space for students to do research is currently limited and expanding that is valuable
- Tying in connections to **ag and technology** could broaden the student base and fill a growing skills gap; where high tech sensors, etc are helping drive improvements in sustainable agriculture, but the workforce is currently challenged to try and keep up with managing the technology advances, especially re: operations and maintenance of these systems.
 - o Our operations need to provide students access to cutting edge technology
- Can we have an opportunity through this initiative for **business learning**? Building linkages with GSM, ag economics, and other business programs to expose future ag business leaders to build understanding of the complexities of the ag sector, systems thinking, and sustainability considerations beyond profit margins.

2. Russell Ranch/Living Laboratory for Resilient Agriculture (Kate Scow & Team)



We need to produce more food and do so sustainably—exceeding planetary boundaries has been at a cost. Farms are zones of innovation. We need solutions and farms are good places to find them. In particular, we need a farm that is like a laboratory, where it is safe to take risks, ask questions and try solutions. We need farmers asking questions, and innovators testing solutions. We need a diverse group of people—researchers, extension specialists, start-up innovators – a “living laboratory” where they can come together. We believe that Russell Ranch is the perfect nucleating agent for such a lab.

The Century experiment is at its heart – poised to advance game-changing knowledge. The Living Lab concept would go far beyond the existing Russell Ranch. Some of best solutions come from nature – let nature guide us, (e.g.: microbiomes, healthy soil communities), to rediscover agriculture’s true nature and use it to drive true innovation. Health soil = healthy food = healthy people. It’s the soil/food/health nexus.

To do so, we’ll establish mini observatories at field scale to monitor flows and synergies, and use them to generate tools and data for farmers. From the farm we want to scale out using remote sensing – generating knowledge and platforms for forecasting resilience; essentially taking the pulse of different systems, monitoring health, and looking at observations across time. We need everyone together at the same table for user-designed solutions. It will be an uncommon collaboration, with big dividends. A place where students can be inspired to tackle big problems at the system level. All voices are invited to participate to germinate the next breakthroughs in sustainable agriculture.



Discussion

Content and messaging:

- Resonated- outside the sterile classroom; farms as sites for creativity and innovation. That was framed very well at the beginning. You established it well and ran with it. Good concrete images and visions; great energy. The rhetoric and language, metaphorical use of soil based or scientific terms used in a political or social way was very effective.
- Better define problem statement that doesn't include the solution
 - o *How do we help the world to develop and apply agricultural production systems that restore and advance environmental health and human wellbeing?*
- What is single concept:
 - o We want to create a space where people can work together physically, shared facilities to interact together in a research environment, to help design the future of agriculture
 - o Whole farming system devoted to discovering how far we can go, what can we learn from nature?
 - o How to do ag better, using nature as a guiding force?
 - o Focus on nature, but approach it with fantastic tools, to observe in ways never observed before.
 - o Experiential, experimental, and knowledge space
- This began with how we need to produce more food. I don't think that's the overall goal of the living lab.
- Framing to link healthy soils with healthy people resonated. Also need to link that to healthy climate.
 - o Linking back with profitability- framing soil as the foundation of this is valuable. To link this with nutrient cycling, water cycling, wealth cycling is valuable. Could be valuable to create social micro climates for practicing indigenous food ways, food ways of communities of color to counteract the erasure of those cultures.

- *We toned down the soil stuff b/c that's naturally where we want to be.*
 - Soil is the ultimate nexus for agroecology
 - But you're also working in a place where the soil is 65 feet thick. The rest of the world doesn't have soil like that. It would be interesting to set up some plots that have depleted soil. How do you start with a negative instead of starting with a positive?
 - Accelerating soil building processes. From biochar, hugleculture, using microbes to accelerate...
 - Maybe you need to have land in different countries where principles are taken and put in place in different locations. I don't know how you could not be an international program.
- You make a profound statement that we've had it for 25 years. What is the conclusion from that? You should say, in 25 years we've learned ...list 3-5 things that you've learned.
 - Big idea: long term impacts of different types of agriculture. – make sure to hit that as launch to talk
 - **Being ahead of the game** – important concept to highlight.
 - What do you do with data at the end? How to interest people with business interest in sharing?
- Is this a new vision for Russell ranch? – repositioning/repurposing? Concept is extremely valuable.
- More of a storyline – where we started, where we are.
- Act of prioritizing the research agenda –
 - More food, better food, better distributed food?
 - Inputs?
 - Growing cycles, annuals vs perennials as solution?
- Is this a California or a global solution?
 - Eg: California must have dairy as part of solution
- What is collaboration across campus? How does it relate/ does it? Why/why not?
 - 2 levels: people & facilities; many faculty involved, lots of space + time
 - Other fields are more disciplinary, this is the multi-disciplinary approach
 - Includes people from across value chain
 - Need to strengthen people involved / clarify
- How is UCD/RR differentiated from WSU, Cal Poly
 - Grounded in biological agriculture , as well as social equity, other considerations
- “Working farm” concept problematic
 - Doesn't need to be working farm, per se, but getting working farming experience on team is important.
- Why call it a lab? It's not a lab. The last group questioned language very specifically.
 - *It's more of a 'living laboratory' but still brings in to questions if it's the right word.*
- **Resonating words:**
 - Farms and farmworkers as innovators
 - RR as nucleating agent
 - Nature as teacher
- Other buzz words: Resilience – overtly talk about what that is? Soils: healthy soils; Adaptive and responsive management?
 - Resilience is a scientific term that you could back up with a number of different disciplines. Resilience has health meaning, cultural meanings. Complexity and depth of the term seems ok.
- **Images** are always opinions – careful of what you choose.

- Too much bare earth, monocrop photos?
- Maybe have 5 minute infographic, artist rendition? (not easily captured by photos)
- Hook/different format, medium – video, artist rendition
- Odd photo: male student has his hands in his pockets.
- Image of healthy turnips- make a comparison somehow between an RR vegetable and a conventional vegetable- what makes it healthy? Any image you use has to reinforce the message.
- For non-ag audience, lead with ag framing snap: impacts of ag on society, eg; water/pricing, etc...
 - 2 talks: ag community vs. non-ag community
- For lightning talk – focus on end – where info is going, who will use it?
 - Academic profile – good overview, good in-house discussion
 - Donor profile – this isn't the right presentation.
 - Paper does pretty good job for donor pool.

Social Equity:

- How do you consider **social equity**?
 - At the beginning, when you start to design the program, you can include people at the beginning to imagine what you're going to do.
 - It's also about making connections to social equity more explicit in the work we're already doing. It's not just about presuming it's not being done already to some degree. Could mean new focus on dissemination, translation, engaged research.
- Don't like social equity being something you "include", should be a baseline component; agroecology already includes that concept
 - Should Social Equity be the "big idea"?
- Don't need diverse audiences as much as diverse "designers". Eg: Can add language farmworker, farmer, as part of planning process?
- Idea: student support for RR student researchers (free tuition, like football);

Specific focus areas to consider:

- Need for **jobs/ergonomic innovation**, improvements; jobs, agricultural employee component not mentioned; health and safety
- Another area: **health and safety**, occupational exposure
 - What does this mean for a field worker? Does it mean we don't need to spray as much?
- **Livestock**: need more attention to dairy industry; not innovating right now - big opportunity area; consider taking further focus in dairy
- **Yield**. How do all these questions impact yield? What are the unintended consequences of planting trees and the major transition in the valley to tree crops.
 - Counterpoint: A potential research initiative is how we analyze yield. Are we looking at weight? At nutritional content of food relative to nutritional content of soil? What if we are producing less poundage of foods, but its more nutritionally dense? Link in there somewhere with social equity and how we are assessing the productivity of the land.
- **Water**- we are only beginning to see the impact of what we do in the handling and reuse of water.
- **Scale**: We need to think about sustainability locally. Need to consider scale issues.
- **Nitrogen**: Could you use some of the findings from the CNA and put them in place?

3. Synthesis discussion: Bringing the 2 sessions together, and thinking about linkages between the SLLC and RR ideas

Living Laboratory:

- Need to focus on impact, why we're doing it – how to define it
- “producing more food” not right approach
- Need to bring more voices into the design, particularly labor and employees and that they benefit
- Need to engage more fully with students.
- Is this something for CA or something for the globe?
 - o Seemed to be agreement that global was the way to go
- Is the map ‘everything for everyone’ or does it address what the key concerns are?
- 25 years of research, what have you found?

SLLC:

- Infuse students into the program more, help them drive it more.
- Imaging- how are we projecting SLLC? Reflect where we are and where we want to go.
- Food-how food can be utilized through student farm as university and community?
- Tech- idea of sensors and how students can get hands on experience about tech software prior to graduation
- What does sustainable mean and how does that look between west campus and the student farm?
- What will the infrastructure look like?
- What's unique? Why is SLLC unique to UCD, CA, U.S.
- Can SLLC be a pilot for other programs?

Discussion: Are these ideas more compelling together or apart? Is the audience different or the same?

Discussion on the merit of combining the 2 big ideas into one broader one brought about some interesting points. The general feeling leaned towards keeping the ideas as separate proposals, but the ASI team agreed to further explore what it might look like to join the proposals. Some of the key arguments include:

- We run risk of diluting projects by combining; benefit would be potentially increasing student involvement @ RR
- One possibility for putting together – show scaling from small to larger, would take strong messaging
- Ideas sufficiently different to keep separate, better fundraising
 - o For both: more directly tie to ASI's vision “ ASI labeled” and CA&ES and ANR
 - o Better show impacts:
 - o For RR – more connectivity to campus (arboretum)
 - o Process of linking may get them to higher impact; very place based now-programming impact may be more compelling.
- Funders/audiences seem fairly different, shrink pool when you put them together.
- SLLC is more of an educational role/good of student; RR is research/good of world

Development of the “Big Ideas” Presentation/Discussion with campus leaders. (Shaun Keister, Vice Chancellor, Development and Alumni Relations, UCD; Paul Prokop, Assoc. Vice Chancellor, Development, UCD)

Campus leaders joined ASI to discuss the next UC Davis fundraising campaign, and how the “Big Idea” concept will proceed. ASI will use guidance from this meeting to further develop and submit both of the concepts being discussed, the Sustainable Living and Learning Communities (SLLC), and the Living Laboratory for Sustainable Agriculture, to be part of this fundraising campaign.

Big Idea Timeline

Cycle 1:

- Oct 16, 2015: Public Call for Big Ideas (website live)
 - o Rolling, no later than March 1, 2016: Submit initial Big Idea through online portal
- Nov 2015 – April 2016: Big Ideas review by Campaign Steering Committee
 - o Rolling: Approved ideas assigned to development writer
- April 2016: Whitepaper review by Campaign Steering Committee
- July 2016 - June 2017: Communicate selected Big Ideas to key volunteers and prospective donors
- Jan-June 2017: Conduct feasibility study
- July-Aug 2017: Campaign Steering Committee and key volunteers review results



Cycle 2:

- Begins spring 2018

Big Idea Definition

A 'Big Idea'...

- Is transformational
 - o Is strategic, reputational, leveraging/inspiring, programmatic, financial
- Is a single-concept idea
 - Is not a collection of smaller naming opportunities
- Builds on a UC Davis strength/foundation but is moving towards something leading-edge
- Interdisciplinary or having interdisciplinary impact
- An area where UC Davis has the unique capacity to be the best

One UC DAVIS

Underlying principal: *Ideas drive the philanthropy – not inverse*

Document ideas so all fundraising team can easily access

- How will the big idea change the world?
- What are the benefits of collaborating with units involved?
- How will this collaboration advance knowledge?
- Why does it matter? Why UCD?

Closing

ASI extends a heartfelt *thank you* to each of our board members and guests for their engagement and valuable insights throughout the day. The group provided critical input to our BIG IDEAS concepts and other discussions, and the conversation has helped us refine and improve the concepts. We look forward to continuing our conversations into their next phases with you.

Please stay tuned over the coming year, as we reach out for further discussion as the conversations unfold.

LOOKING AHEAD: NEXT YEAR'S EAB MEETING WILL TAKE PLACE **TUESDAY, NOVEMBER 15, 2016**, (POTENTIALLY IN FRESNO, CA).

RECAP: Action items

1. **PREPARE "BIG IDEAS" PROPOSALS FOR CAMPUS CONSIDERATION**
 - a. *Frame how combining the 2 concepts may work, and decide if that seems desirable*
 - b. *Engage EAB further as ideas develop and proposals move through the formal process*(Russell Ranch Team, Student Farm Team, with Tom Tomich, Melissa Haworth, and Patrick Nolan)
2. **CONTINUE TO FOCUS ON INCREASING THE DIVERSITY AND REPRESENTATION WITHIN ASI AND OUR PROGRAMMING** (ASI Leadership Team)
3. **ASI AGREEMENT TO FOLLOW UP WITH STUDENT GROUP TO DISCUSS GILTRACT CLOSURE** (Tom Tomich)
4. **SUGGESTION: LOOK INTO STUNTING RATE FOR FARMWORKER CHILDREN, AS COMPARED TO NATIONAL AND REGIONAL AVERAGE** (Social Equity Leadership Team)

CONTACT LIST

AGRICULTURAL SUSTAINABILITY INSTITUTE

Leadership

Thomas P. Tomich

Director, ASI and SAREP
Kellogg Endowed Chair in Sustainable Food Systems
Professor, Department of Community Development &
Department of Environmental Science & Policy
(530) 752-3915 or (530) 574-2503
tptomich@ucdavis.edu

Ermias Kebreab

Deputy Director, ASI
Sesnon Endowed Chair in Sustainable Agriculture
Professor, Department of Animal Science
(530) 752-5902
ekebreab@ucdavis.edu

Gail Feenstra

Deputy Director, SAREP
Academic Coordinator, Food Systems
ASI/SAREP
(530) 752-8408
gwfeenstra@ucdavis.edu

Sonja Brodt

Academic Coordinator, Agriculture, Resources
and Environment
ASI/SAREP
(530) 754-8547
sbbrodt@ucdavis.edu

Kate Scow

Director, Russell Ranch Sustainable Agriculture Facility
Professor, Department of Land, Air and Water
Resources
(530) 754-9668
kmscow@ucdavis.edu

Mark Van Horn

Academic Coordinator, Education and Leadership
Director, Student Farm
(530) 752-7645
mxvanhorn@ucdavis.edu

Core staff

Bev Ransom

Program Manager
ASI/SAREP
(530) 754-8546
baransom@ucdavis.edu

Stephanie Macey-Gallow

Financial Analyst
ASI/SAREP
(530) 752-8407
smaceygallow@ucdavis.edu

Aubrey White

Communications Coordinator
ASI/SAREP
(530) 752-5299
abwhite@ucdavis.edu

Development Officers

Melissa Haworth

Director of Major Gifts
College of Agricultural and Environmental Sciences
University of California, Davis
(530) 979-1440
mdhaworth@ucdavis.edu

Patrick Nolan

Director of Major Gifts
College of Agricultural and Environmental Sciences
University of California, Davis
(530) 752-1184
pnolan@ucdavis.edu

2014 EXTERNAL ADVISORY BOARD

**Executive committee*

Current members (in alphabetical order):

Ashley Boren*, Executive Director, Sustainable Conservation, San Francisco, CA

Renata Brillinger, Executive Director California Climate & Agriculture Network (CalCAN), Sebastopol, CA

John Diener, President, Red Rock Ranch, Five Points, CA

Michael Dimock, Executive Director, Roots of Change, San Francisco, CA

John Foraker, Chief Executive Officer, Annie's Inc., Berkeley, CA

Cornelius Gallagher, Senior Vice President, Food, Agriculture and Wine Executive, Bank of America, Roseville, CA

Harold Goldstein, Executive Director, California Center for Public Health Advocacy

Martha Guzman Aceves, Deputy Legislative Affairs Secretary, Office of Governor Edmund G. Brown, Jr., Sacramento, CA

Carl Johnson*, Chairman of the Board, Nautilus, Inc., San Francisco, CA

AG Kawamura*, Founding Member, Orange County Produce, Irvine, CA; and former Secretary, California Department of Food and Agriculture

Barry Kreibel, President, Sun-Maid Growers of California, Kingsburg, CA

Russ Lester, Co-Owner, Dixon Ridge Farms, Winters, CA

Joann Lo, Co-Director, Food Chain Workers Alliance, Los Angeles, CA

Marshall McKay, Chairman Emeritus, Yocha Dehe Wintun Nation, Brooks, CA

Puon Penn, Executive Vice President/Co-Head, Wells Fargo's Technology Banking Group, Palo Alto, CA

Amparo Perez-Lemus, AP Lemus & Associates Marketing and Public Relations, Davis, CA

Karen Ross, Secretary, California Department of Food and Agriculture, Sacramento, CA

D'Artagnan Scorza, Founder and Executive Director, Social Justice Learning Institute, Los Angeles, CA

Howard-Yana Shapiro*, Chief Agricultural Officer, Mars, Inc; Senior Fellow, Plant Sciences Department, UC Davis; Distinguished Fellow, World Agroforestry Centre, Nairobi, Kenya; ASI Board Chair, Davis, CA

Rachel Surls, Sustainable Food Systems Advisor, UC Cooperative Extension Los Angeles County, Los Angeles, CA

Thomas Turini, Vegetable Crops Farm Advisor, UC Cooperative Extension Fresno County, Fresno, CA

Nita Vail, Chief Executive Officer, California Rangeland Trust, Sacramento, CA

Paul Wenger, President, California Farm Bureau Federation, and farmer, Modesto, CA

Ex officio members (in alphabetical order):

Andrew Baskin, Undergraduate Student, Sustainable Agriculture & Food Systems, University of California, Davis

Helene Dillard, Dean, College of Agricultural & Environmental Sciences, University of California, Davis

Kelly Gravuer, PhD Candidate, Ecology Graduate Group, Plant Sciences Department, University of California, Davis

Glenda Humiston, Vice President, Agriculture and Natural Resources, University of California, Oakland, CA