

## Invite-a-Colleague Abstract Template for Oral Presentations:

Abstracts are required to be submitted with the following formatting and specifications:

### General specifications:

- Font: Times New Roman
- 1.0 Line Space
- 12 point type size

### Your name and affiliation(s):

- Provide your name, affiliation and contact information (at least an email address).

### Abstract Text:

- 500 word limit, excluding author and affiliation(s) and the 26 words that comprise the abstract headings
- Do not include figures or references
- Underline and use, exactly, these headings in the abstract:
  - Research Interests / Area of Expertise:
  - Examples of Research Capabilities:
  - How my research is / can be used toward California Agriculture:
  - Future plans for research and potential collaborations:

### Example Abstract:

*(Disclaimer: Please note I (David Still) wrote the following example based on Dr. Sommerhalter's online profile and a recently published paper of hers)*

#### Monika Sommerhalter

*Affiliation: Department of Chemistry and Biochemistry, CSU East Bay, Hayward CA*

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#### Research Interests / Area of Expertise

I am broadly interested in biochemistry, enzyme kinetics and proteins. My current research projects are centered around enzymes. Several undergraduate and graduate students are working on the sol-gel entrapment of the enzyme Chloroperoxidase to create a re-usable biocatalyst for peroxidation reactions. Another group of students is characterizing enzymes from the marine nudibranch Tritonia diomedea. Our current enzyme targets are involved in neurotransmission (acetylcholinesterase) or detoxification (glutathione-S-transferase). We also characterized a non-canonical nucleoside triphosphatase using protein X-ray crystallography and enzyme activity measurement.

#### Examples of Research Capabilities:

*(please provide research capabilities that might be of interest to others, especially if you would like to contribute that capability in a collaborative effort.*

*For example, HPLC of enzyme activity, bioinformatic analyses, RNAseq, remote sensing, etc.*

#### How my research is/can be used toward California Agriculture:

High quality irrigation water is in short supply in California. Poplar clones can be used for selenium and boron phytoremediation. In this project my lab used HPLC and absorption-based assays to determine the antioxidant capacity, total phenolic content, hydroxycinnamic acid levels, and the enzyme activity of L-phenylalanine ammonia lyase (PAL), polyphenol oxidase (PPO), phenol peroxidase (POD), and laccase. Most remarkable was the contrasting response of the two poplar clones for PPO activity and phenolic

levels to irrigation with high salt/B water. To cope with stressful growing conditions, only one clone increased its phenolic antioxidant level, and each clone displayed different PPO isoform patterns. Our study shows that poplar hybrids of the same parentage can differ in their salt/B stress coping mechanism

Future plans for research and potential collaborations:

*Please indicate what types of projects you may have that would benefit from collaborators, or vice versa, what you might be interested in offering in way of collaboration.*