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## Background and Aims

Teenagers who acquire five or more sunburns have a significantly increased skin cancer risk. Effective targeted primary prevention in skin cancer prevention tailored to the learning needs of this age group is lacking. Visualizing the impact of health choices has been shown to positively influence learning, behavioral change in children. We aim to educate students, while also providing mentorship on health careers. Exposure to career opportunities in high school is a first step to increase interest in health sciences, and our pilot program showcases pediatric dermatology as a model.

**Aim 1: Address need for far reaching educational platforms to raise skin cancer awareness and educate about sun protection starting in middle and high school**

**Aim 2: Increase excitement about health science careers in middle and high school**

## Didactic Workshop Design

### Community Partnership for Didactic Workshops

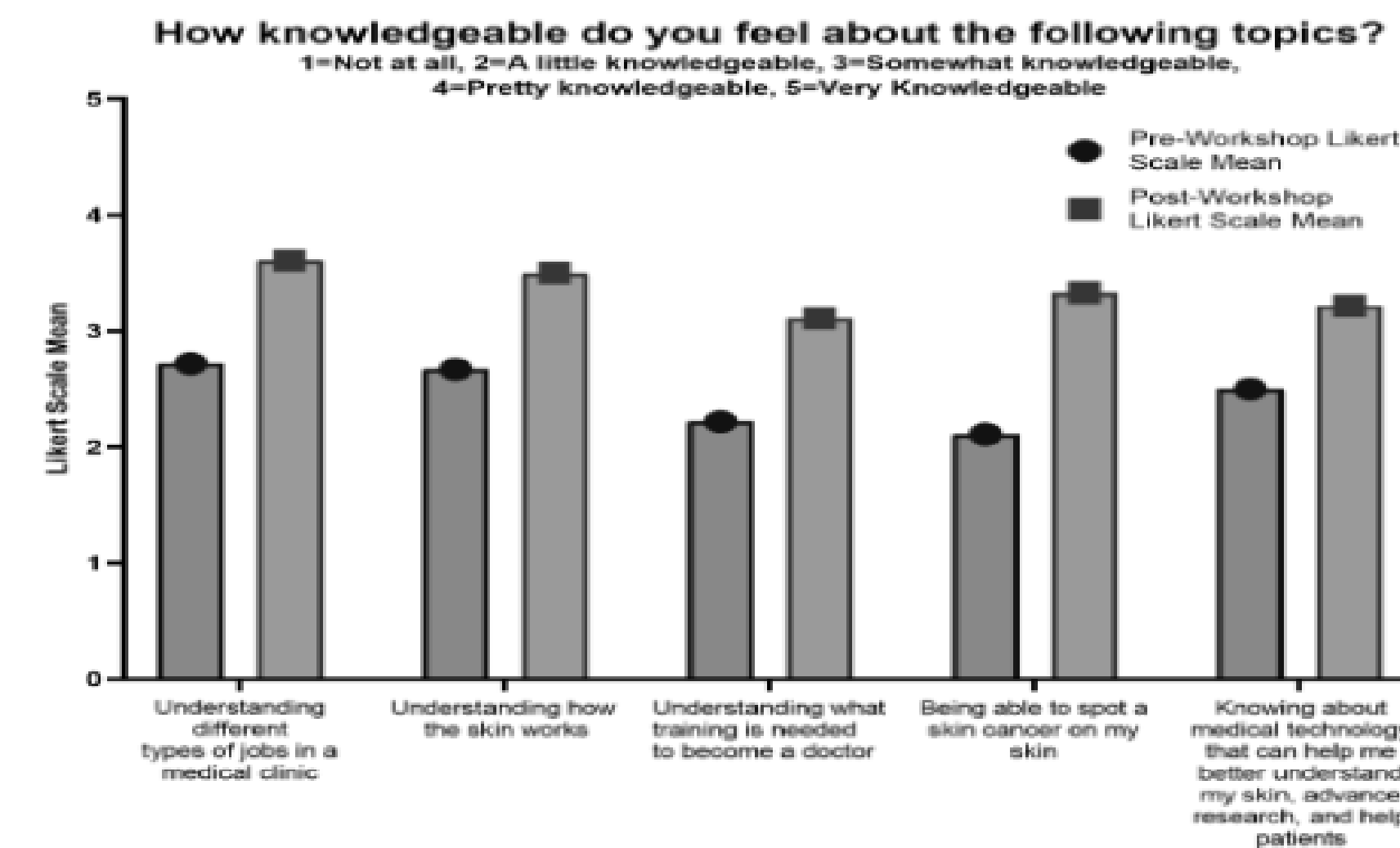
- Boys & Girls Clubs of the Peninsula (BGCP), whose mission is to empower the youth in our community with equitable access to social, academic, and career opportunities to thrive.
- Stanford Graduate School of Education Center to Support Excellence in Teaching (CSET) has been collaborating on curriculum design and pedagogy.

**Curriculum Design:** Based on community input, we designed and implemented an interactive curriculum.



## Didactic Workshop Results

Pre- and post-workshop surveys were used to assess the program's effectiveness. For statistical analysis, t-tests were utilized with STATA software. Students reported increased knowledge of skin cancer recognition.



## Conclusions

Our pilot program demonstrated that interactive programs with community youth programs can be an effective way to educate youth in under-resourced areas on skin cancer awareness and health science careers. If successful, iTS-CORE will enable students to have a immersive, personalized, and futuristic approach to learning.

## Acknowledgements

We are grateful to:

- American Academy of Dermatology Good Skin Knowledge Program for their advice on educational activities
- zSpace, a California-based tech company that designs immersive and interactive learning experiences, for providing the technology for our VR prototype
- Wipe Out Melanoma California and the Stanford Skin Innovation and Interventional Research Group for their collaboration and support

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- Stanford Maternal & Child Health Research Institute (MCHRI) Structural Racism, Social Inequity, and Health Disparity Pilot Grant
- Stanford Office of Community Engagement Seed Award

## Development of a Virtual Realty Sun Safety App: Methods

**Community Partnership:** San Mateo County Office of Education (SMCOE)

### Key design elements:

- Collaboration with the Stanford Virtual Human Interaction Lab
- Multisensory experiences to encourage sun safety behaviors
- Involvement of teachers and students in the design of the new curriculum
- Creates excitement and connection for careers in science and medicine among marginalized students to increase future access to these careers
- Focus groups for qualitative data feedback on our prototype

Figure 1: Storyboard overview:



Figure 2: Prototype Development:

Avatars will be available in a variety of skin tones and students will be able to personalize their avatar.



## References

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iTS-CORE website

