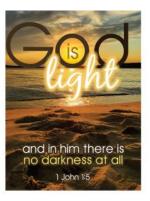


The Shepherd's Voice October 2022

GOOD
SHEPHERD
LUTHERAN
CHURCH
MISSION
STATEMENT

Sharing The Love of Jesus



PASTOR TED NIEMI

Telephone: (559) 225-2092

Church Office Email: gslcfresno@att.net Pastor Ted's Office Email: PastorTedGSLC@gmail.com

> Web Site: www.fresnogslc.org Facebook

You are welcome to join us at Good Shepherd Lutheran Church Dear Friends,

I occasionally share things here with you that I find meaningful. I recently read an article that had a lot of relevance to our life together. These are the words of David Lose of Mount Olivet Lutheran Church in Minneapolis. I hope they are a blessing to you the way they spoke to me:

A Welcome Invitation

What if I told you that you had the power to help solve one of the greatest challenges we're facing today?

First, the challenge: we are experiencing what Harvard social scientist Arthur Brooks has described as "an epidemic of loneliness" with two main sources.

Our time online is the first. MIT researcher Sherry Turkle has documented that the amount of time we spend on social media has left people feeling simultaneously "more connected and lonelier." Why this seeming contradiction? Because the connections made online — "friends," "followers," etc. — are relatively superficial, offering an initial sense of connectedness followed by a pervasive sense of isolation. Online interaction can support meaningful relationships already established in-person but routinely fail at creating such relationships.

Second, this trend toward isolation has been greatly exacerbated by the pandemic. Practices that reduced the spread of the coronavirus — limiting in-person interactions, sheltering in place, working and going to school remotely — also compounded our sense of isolation. While some people have resounded easily as pandemic restrictions have eased, others are still reticent to venture out or are simply out of the routine with regard to many of their interpersonal interactions.

So what is one way we can address this epidemic? By coming to church for worship, fellowship, learning, and service and inviting others to do the same! Think about it: at church you see and greet other people, renew established friendships and make new ones, are encouraged in your faith, and are reminded of all we have for which to be grateful. You also have the chance to learn something new or contribute to the wellbeing of your community — two activities regularly linked to more resilient mental health — in the company of others.

If you're back in the habit of being at church regularly, fantastic! If you have not been making regular participation at church a priority, I encourage you to do so. You will feel better, and so will all those who get to see and interact with you. Our shared life together as a congregation is one of the most important antidotes to the current epidemic.

And then... one more thing: consider inviting a friend or family member to church, too! I know this makes some of us nervous, as we are wary of seeming "pushy" when it comes to faith. Yet when researchers asked church members what brought them to their current congregation, more than two-thirds responded that it was the personal invitation of a friend.

That invitation might be to a friend who is already a member but who hasn't been to church in a while. These may be the easiest invitations to extend because you're building on both an established relationship and a previous practice: "I've missed seeing you at church. It's going to be a fun fall. I hope you'll come around." These invitations also pay high dividends. Methodist minister Rebekah Gimon-Parker reports that, when polled, nearly half of people no longer attending church said they would return if someone invited them. Younger respondents were even more likely to favor an invitation, as nearly two thirds of those ages 18-35 said they would consider returning if someone they knew asked them to come back.

There are lots of folks in our lives who aren't members of [Good Shepherd] who would also welcome an invitation. Most people seek out church because they sense something is missing in their lives, something a congregation like ours can offer: community, relationships, a sense of purpose, help in navigating life's challenges, a chance to contribute to the greater good, and hope about the future. As Simon-Parker says, "people long to belong," and therefore often welcome what she describes as a "sincere, guiltfree invitation." That is, we're not scolding people for what they're not doing, but inviting them to something we value and think they will, too. A constant refrain in John's Gospel is "Come and see" (1:38, 1:46, 4:29) and offers an example of something we can do, too.

You'll have contributed to helping each other out the epidemic of loneliness we're experiencing.

Thank you for your faith, your welcome invitation, and your part in o<mark>ur wonder-ful congregation. And... see you at Church!</mark>

God's Peace,

Pastor Ted

Prayer Concerns

Members in Need of Family and Friends:

Praver:

Marlene Beasle Marge Kinler

Liz Smith Bill Biggs

Mona White

Kay Schumacher &

Family

Mary Schmidt **Vonny Sturgeon**

Chris Walker

Arlene Robbins

Mary Norris & Family

Julie Werfelmann &

Family

Jennifer Neer & Family

Connie Alvarado Doris Moscatelli Mabel Vogler

Susan Berg

Irene Pierini

Jocelyn Miller

Kirsten Linder

Jim Thompson

Grace Johnson (Fake) Sierra Ramirez (Norris) Krystina Ramos (Norris) Dora Barraza (Norris) Jeanna (Sullivan) Jennifer (Wilk) Wenzel

The Neil Walden Family The Wenzel Family (Wilk/

Wenzel)

Carlos & Anne Cortez

(Norris)

Sandy Robbins (Robbins) Karl & Pauline Ritterbush

Autumn Dunlop

(Anderson)

JJ Werfelmann (Julie) Gloria Valdez (Norris)

Emily & Sawyer Bogart

(Anderson)

Roger Robbins (Robbins)

Michelle B. (Norris) Bonnie Wolfe (Norris)

Diane's Sisters

Hudson Otten (Anderson)

Mary (Wilk)

Karen Ohanesian (Havs)

Rosemary (Vonny)

Eric & Cathy Bose(Bachar) Nathan Robbins(Robbins)

Darlee (Norris)

Liz Smith - 10/08 Susan Berg - 10/09 Francis Sullivan – 10/13 Marilyn Woodward – 10/14 Arlene Robbins - 10/15 George Weber – 10/21 Ted Miller – 10/23 James Thompson – 10/29

*Any one that has seen a missing or incorrect birthday, baptismal, or anniversary date please contact Kathy in the office. 559-225-2092



Brenda Hofmann - 10/01 Linda Roberts - 10/11 Mark Sanchez - 10/15 Kurt Niemi – 10/17

Celebrating An Anniversary This Month

If anyone has an anniversary this month, we do not have the info. Please email it to Kathy.

"If in my name you ask me for anything, I will do it."

PRAYERS FOR

All Good Shepherd Families Who Have Lost Loved Ones, Members of Our Military Service, First Responders, & Those Affected by Natural Disasters and COVID-19.

For Prayer Requests Call or email the Church Office 225-2092/gslcfresno@att.net

STEWARDSHIP OF				
WORSHIP & OFFERINGS	September 4, 2022	September 11, 2022	September 18, 2022	September 25, 2022
Attendance	LOVED	1 CHEEN	LOT OI	V L K .
	40	47	28	36
0				
General Fund	\$6,575.00	\$5,895.00	\$1,185.00	\$2,375.00
Special Memorial (designated funds)				
ELCA Disaster Response World Hunger/Malaria (designated funds)				
Community Center Capital Fund	Loose Plate: \$100.00	Loose Plate: \$11.00	Loose Plate: \$100.00	Loose Plate: \$20.00
Loose Plate				
Special Mission Project Gifts (designated funds)				Thanksgiving Fund: \$50.00 Roeding: \$10.00
BIA Rent/ Property Use/ Misc.	Property Use: \$			
	\$6,675.00	\$5,906.00	\$1,285.00	\$2,455.00

September Financials

SGIVING SIMATTERS!

Dear Good Shepherd Family,

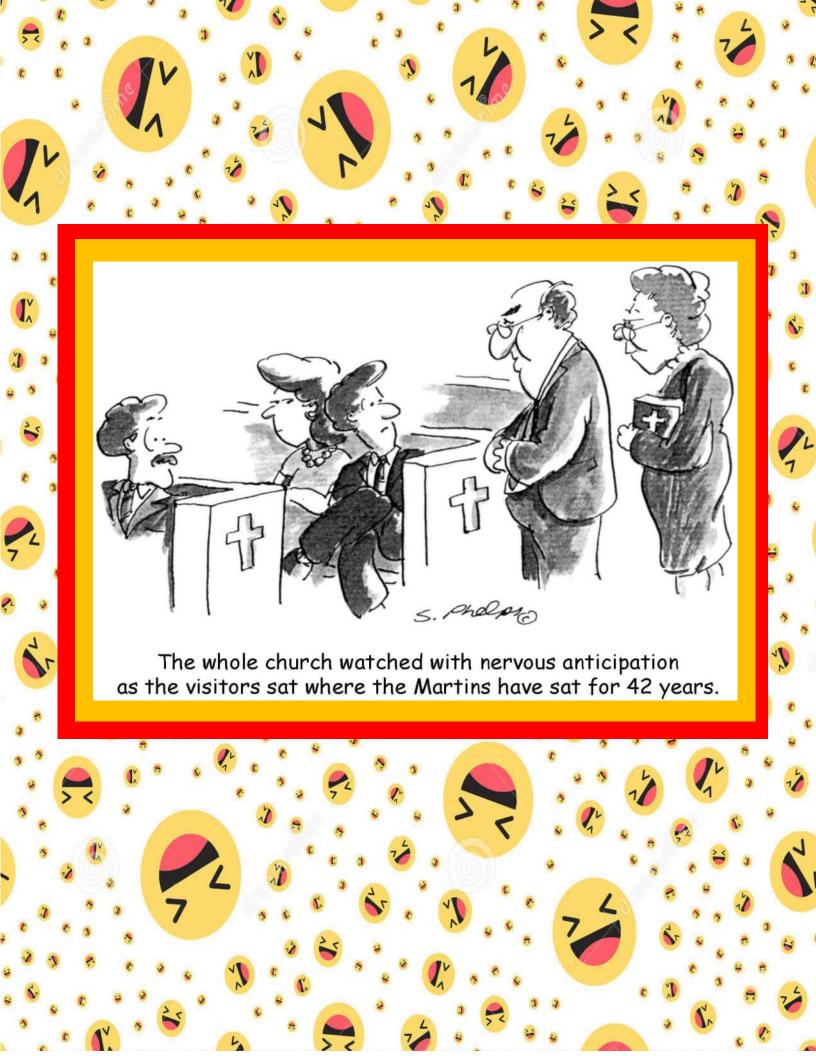
It was a very difficult month. The donations down, which is two months in a row when they were down. Our Income has not been enough to meet our regular expenses. We had no unexpected bills last month. Please pray for the church's financial health. There will be a budget meeting coming up late October or early November. If you have any ideas let me know and I will add you to the group that meets.

Yours in Christ, Caroline Sullivan

						Monthly
		8/29-9/4	9/5 - 9/11	9/12 - 9/18	9/18 -9/25	Total
	BIA					\$0.00
	General Funds	\$6,575.00	\$5,895.00	\$1,185.00	\$2,375.00	\$16,030.00
	Plate Visitors	\$100.00	\$11.00	\$100.00	\$20.00	\$231.00
	Roeding				\$10.00	\$10.00
	Thanksgiving Bas-					
	kets				\$50.00	\$50.00
10000000000000000000000000000000000000						
	Total	\$6,675.00	\$5,906.00	\$1,285.00	\$2,455.00	\$16,321.00



\$6,675.00	\$5,906.00 \$1,	285.00 \$2,45	5.00 \$16,321.00
Month	Income	Expenses	Difference
Jan.	\$26,059.68	\$25,671.37	\$388.31
Feb	\$39,072.90	\$26,260.04	\$12,812.86
Mar	\$19,168.42	\$27,104.30	(\$7,935.88)
Apr	\$26,422.41	\$27,329.12	(\$906.71)
May	\$30,210.94	\$17,278.61	\$12,932.33
Jun	\$13,475.40	\$36,120.31	(\$22,644.91)
Jul	\$28,604.94	\$21,973.25	\$6,631.69
Aug	\$19,653.21	\$35,701.73	(\$16,048.52)
Sep	\$16,261.00	\$28,644.13	(\$12,383.13)
Oct			\$0.00
Nov			\$0.00
Dec			\$0.00
Total	\$218,928.90	\$246,082.86	(\$27,153.96)





COFFEE HOSTS/HOSTESSES NEEDED!!!

We need people to sign up to be host/hostess for Oct./ Nov. If you are able to host/hostess for a Sunday, please sign up in Jacobson Hall.



OCTOBER/NOVEMBER/DECEMBER EVENTS

Oct. 8 - Memorial Reception for Earl L Ann Mose, Jacobson Hall Compress G

Oct. 16 - Pet Blessing, Court Yard, Time 2PM

Oct. 22 - Memorial Ğarden Spaghetti-fest & Raffle

Oct. 30 - Reformation Sunday Service @ 10AM

Oct. 30- Pumpkin Carving/Spooky Potluck, 11:30PM

Nov. 6 - Daylight Savings Ends

Nov. 24 - THĂNSGIVING—Office Closed in observance of Thanksgiving.

Dec.? - Gingerbread House Throwdown, Jacobson Hall, Time TBA

Dec. 18? - Congregational Meeting, Following Service

Dec. 24 - Christmas Eve Service, 7PM

We will be having our Blessing of the Animals Service once

We will be having our Blessing of the Animals Sérvice once again this year. We will gather in the courtyard with our animal companions @ 2 PM on October 16th. Pets of all kinds are welcome to join us as long as they are leashed or in carriers. Each and every pet will receive a blessing and a certificate as we join together to thank God for our animal friends. Please spread the word and invite your friends and neighbors to bring their pets, too. It'll be a "pawsome" time for all!



EVENTS

It's that time again!, socks are needed for Westside Rescue.

Sock it to Me! SOCK DRIVE 2022

THANKSGIVING FOOD BASKETS

It's Fall - time to think of our blessings, and to share with others. Last Thanksgiving, we provided food baskets for many who may not otherwise have been able to celebrate a special Thanksgiving meal. Please bring canned or dried food stuffs to church - a pink bin will be in the Narthex for donations or you may drop them off with Kathy in the office, 9am-1pm.

Food Suggestions:

- 1. Green beans
- 2. Cream of mushroom soup
- 3. Frenches onion rings

(these 3 can make an easy casserole)

4. Mashed potatoes Mix

5. Canned Yams

6. Peanut Butter

7. Canned Fruits

8. Grape Jelly

9. Cornbread

10. Jell-O



Thanksgiving Baskets

Please consider giving generously to Good Shepherd's Thanksgiving Basket Fund in this time of need. Thank you so much to our Good Shepherd family 's past and present generosity. Gift Cards may be purchased or checks may be written to Good Shepherd, with a memo of 'Thanksgiving Baskets' which will be used for meat & fresh food.

Yours in Christ, Pam Gerster, Stewardship (559-999-5443)



OPEN POSITION!!!!

Bethel Lutheran Church is looking to fill the position of Parish Secretary. If you speak and write clearly, have solid computer skills, are organized, like working alone, can honor confidentiality, and would enjoy being the face of Christ to the congregation and to all who come in contact with the church, we'd love to talk with you! Please contact Maria Reich at 264-5385 or bethelelca@gmail.com.





Christ in Our Home

The 'Christ in Our Home' Devotional for Oct.—Dec. is available in the office. You may pick one up M-F, 9am-1pm or you can email Kathy and she will send one out, just let her know if you prefer regular or large print.

GSLC Memorial Garden Presents "Spaghetti-Fest" 2022 Saturday October 22nd

6:00PM Jacobson Hall

For those of you who may not be able to attend church on Sundays, please call or email Diane for information on how to buy dinner and/or raffle tickets. Cell: (559)917-6686

email: gordonrf@comcast.net

Great food!

Wine!

- Accordion player!
 - Dancing!
- 💶 \$20. per person \$50 family
 - Tickets on sale Sep. 18th

And every Sunday Thru Oct. 16th (3 Sundays left to make your purchase)

Spaghetti-fest Raffle Need not be present to win!!

1 for \$1.00 6 for \$5.00 14 for \$10.00 30 for \$20.00



Roger Rocka's Dinner and Show for two Baskets

Wine And More!





LHN Free Neighborhood Market @ The International Worship Center, 10/1, 9-11a.m.

There will be a food distribution of the Lutheran Hunger Network's FREE Neighborhood Market at the International Worship Ctr., located at 3140 N. Argyle on Saturday, 10/1, from 9-11 a.m. Central CA Food Bank will provide gloves, but volunteers need to bring their own masks if desired and wear close toed shoes. As in the past, anyone planning to volunteer on Saturday who is or has been feeling ill - especially if they have or have had a fever, cough or flulike symptoms - is asked to PLEASE stay home. Volunteers will be encouraged to drive through and get food for their own household, too, just like usual.

Please share this information with anyone you know who could benefit and with those who might want to volunteer. Questions can be directed to Julie @ 13jdixon13@gmail.com or 559 -287-3457. Thank you for your ongoing support of this ministry!

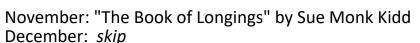
CENTRAL

Shalom. Peace. Paz.

Julie Werfelmann

GSLC Book Club ~Oct. 16 @ 6:30PM 2022-23 Book List

CALIFORNIA FOOD BANK



January: "The Lost Letters of Pergamom" by Bruce Longenecker

February: "Sea of Tranquility" by Emily St John Mandele

March: "In an Instant" by Suzanne Redfern April: "The Beantown Girls" by Jane Healey May: "One Italian Summer" by Rebecca Serle

The Personal Librarian by Marie Benedict and Victoria Christopher Murray
In her twenties, Belle da Costa Greene is hired by J. P. Morgan to curate a
collection of rare manuscripts, books, and artwork for his newly built Pierpont
Morgan Library. Belle becomes a fixture in New York City society and one of the
most powerful people in the art and book world, known for her impeccable taste
and shrewd negotiating for critical works as she helps create a world-class collection.

But Belle has a secret, one she must protect at all costs. She was born not Belle da Costa Greene but Belle Marion Greener. She is the daughter of Richard Greener, the first Black graduate of Harvard and a well-known advocate for equality. Belle's complexion isn't dark because of her alleged Portuguese heritage that lets her pass as White—her complexion is dark because she is African American.

In the category *Historical Fiction*, this is a story of an extraordinary woman, famous for her intellect, style, and wit, and shares the lengths she must go to—for the protection of her family and her legacy—to preserve her carefully crafted White identity in the racist world in which she lives. --Amazon

Available from the public library and your favorite book seller. Join us for casual discussion Sunday, October 16 at 4:00 in the Community Center.

Join us any month a book catches your fancy. No long term commitment!

theran

PERSONAL LIBRARIAN

Lunger

Network

REFORMATION SUNDAY—10/30 @ 10AM WORSHIP AND FUN



JOIN US FOR REFORMATION SUNDAY OCTOBER 30th
In 1517, Martin Luther posted his list of 95 Theses and posted them on
the church door in Wittenberg Germany It sparked the beginning of the
Lutheran Reformation and we celebrate it every year on the last Sunday
of October. Our church will be adorned in red because red represents the
Holy Spirit. Please wear red if you wish, and also wear your Luther Rose
pin if you have one. We will review what the Luther Rose is all about,
Mark your calendar now for October 30th!

PUMPKIN CARVING & SPOOKY POTLUCK



Following worship, we will be hosting our "spooky potluck" and pumpkin carving outside in the courtyard. The congregation is invited to bring some sort of "spooky" dish to share (think "zombie brains" or "witches' fingers") while we will provide the drinks. We can turn the oven on low to keep items warm. We will also be providing pumpkins for carving. Tables will be available outside for eating and for carving. Please be sure to let Julie know if you or members of your family would like a pumpkin to carve via email:13jdixon13@gmail.com or text: 559-287-3457. You are also free to bring your own pumpkin and/or carving tools.



BE SURE TO WEAR RED!

We hope many of our church family will join together for some fun and fellowship this year on Reformation Sunday. As always, you are invited to bring your friends and family!

Pantry Needs Restocking

With the food distribution on 9/10 the pantry has been depleted. We are accepting donations to restock it. We could use: Rice, bagged pasta, canned sauces, canned vegetables (Corn, Green Beans), canned fruit (fruit cocktail, peaches, pineapple), canned chili beans, egg noodles, Cream of mushroom or chicken soup (Can be used with egg noodles to make a meal), Mayo, canned tuna, chicken or beef, boxed mashed potatoes, ramen noodles, Mac N Cheese, boxed pasta meals, peanut butter and grape jelly and gift cards in values of \$15 & \$25. Donations can be dropped off at the office M - F, from 9AM - 1PM.





Wanted Elves!!!

Elves are needed to put up the GSLC Sanctuary Christmas Tree &



WEDNESDAY EVENING BIBLE STUDY Wednesdays at 6:30 in the Community Center

We have <u>just begun</u> a study on the book of **Isaiah, by Melissa Spoelstra**.

The subtitle is "Striving Less and Trusting God More".

Trust is at the heart of every healthy relationship, especially your relationship with God. It's one thing to say you rest in God, but does your stress level, worry, or general lack of peace give evidence that you rely on Him? In this 7-session study, the author encourages you to let go of striving and learn to trust in God's character, His comfort, and even His correction. As we study the book of Isaiah - from the prophet's challenges to the nation of Israel to prophecies of the Messiah - you'll see that you can trust God more than your own human effort or the counterfeits the world suggests. We will finish the study before Thanksgiving.

Unfortunately, at the time this is being submitted for the newsletter, the page turning workbooks from our usual sources are all backordered. Lifeway has an e-book immediately available. I am hopeful that by the time the newsletter is available, you will be able to get a hands-on workbook if you want to join us.

Questions? Contact Sharon Rowley 313-0757 (text okay) or email andrsh@msn.com (put Isaiah in the subject line).

Bible Studies
Dig Deeper with Friends

WALK, GIVE, CHANGE THE WORLD.

CROP Hunger Walks

ENDING HUNGER ONE STEP AT A TIME

Fresno-Clovis Crop Hunger Walk

Crop hunger walks transform Communities Around the block & Around the world

Date: Saturday, October 15, 2022

Time: 9:30 arrival; 10:00 Walk begins

Host Location: First Congregational Church of Fresno

2131 N. Van Ness Blvd., Fresno, CA

Contact: Church Office @ 559-227-8489 for information—Mon-Fri 9am to 4pm

Or

Alan Coles: 559-431-8193(h) or reomesa1@gmail.com

3k Walk ~ Bring Friends ~ Bring Families ~ Bring Friendly Pets

Bottled water and snacks will be provided before and after walk.





Fresno/Clovis Crop Hunger Walk 2022

For Donations:

Checks should be made out to CWS. (It stands for Church World Services.) Checks can be mailed to Alan's office at

Church World Services c/o Rio Mesa Insurance Agency/Alan Coles 3134 Willow Avenue, Suite 102 Clovis, CA 93612

<u>For online donations</u>, Alan has setup a donation site for Fresno/Clovis donations at: https://events.crophungerwalk.org/2022

Go to the "Donate" tab

In the drop-down box, choose "Find a Team to Support" Then in the box: "Search for an individual fundraiser or a team", enter: Fresno/Clovis Crop Hunger Walk 2022

You will then be able to donate for our 2022 walk"

CWS is a disaster relief organization that is often the first relief organization to arrive on scene to provide help. They have units stationed around the world to expediate their on the ground response.

Besides offering relief in disasters, they teach the families in impoverished areas/countries how to grow crops or raise livestock to sell and feed themselves in order to become more self- sustaining. Among their many offerings, they also teach them how to provide clean drinking water to their villages. This is a non-profit organization.



ABOUT CWS CROP HUNGER WALK

The CROP Hunger Walk is a nationwide event sponsored by Church World Service to raise funds to end hunger and poverty in the U.S. and around the world. Hundreds of religious groups, businesses, schools and others organize local Walk events in their communities each year, while others join the National Walk and choose their own location and experience.

Additional information about this organization can be found at https://cwsglobal.org.

Look for https://example.crophungerwalk.org/2022 for additional details about 2022 Crop Hunger Walk.









God's Work, Our Hands

Sewing Saints assemble the Personal Kits for Lutheran World Relief



LUTHERAN JAN WORLD RELIEF





75 Personal Kits for Lutheran World Relief Assembled by Sewing Saints. Pastor said a Prayer of Blessing for these on Rally Sunday.





GSLC Sewing Saints (from left to right) - Debbie Wilk, Jo Ann Huebner, Pam Gerster, Jennifer Neer, Karla Sutton, Dee Wright, Sue Hays, Jill Anderson, Carolyn Linn, Susan Linder, Diane Fake (not pictured)







2

Deb and Sue went shopping for you. Roeding Books we're purchased by Deb and Westside Rescue pet food was purchased by Sue for blessing bags.

Thank you!,

for being a blessing

†



Blessing Bags for Westside Rescue
Go Team GSLC (**) (**) (**)













The Special Music on Rally Sunday was a delightful song called "Clap your Hands, Children" presented by our GS Choral Ensemble (Dee, Carolyn, John, Paul, Ken and Mary)







SPLASH TIME!!!



Kennedy loving the waterslide bounce house





Kurt joins in the fun!

OWLs PUNs for EDUCATED MINDS

1. The fattest knight at King Arthur's round table was Sir Cumference. He acquired his size from too much pi.

2. I thought I saw an eye doctor on an Alaskan island, but it turned out to be an optical Aleutian.

3. She was only a whiskey maker, but he loved her still.

4. A rubber band pistol was confiscated from algebra class, because it was a weapon of math disruption.

5. No matter how much you push the envelope, it'll still be stationery.

6. A dog gave birth to puppies near the road and was cited for littering.

7. A grenade thrown into a kitchen in France would result in Linoleum Blownapart

8. Two silk worms had a race. They ended up in a tie.

9. A hole has been found in the nudist camp wall. The police are looking into it.

10. Time flies like an arrow. Fruit flies like a banana.

11. Atheism is a non-prophet organization.

12. Two hats were hanging on a hat rack in the hallway. One hat said to the other: 'You stay here; I'll go on a head.'

13. I wondered why the baseball kept getting bigger. Then it hit me.

- 14. A sign on the lawn at a drug rehab center said: 'Keep off the Grass.'
- 15. The midget fortune-teller who escaped from prison was a small medium at large.
- 16. The soldier who survived mustard gas and pepper spray is now a seasoned veteran.

17. A backward poet writes inverse.

OWLs PUNs for EDUCATED MINDs

- 18. In a democracy it's your vote that counts. In feudalism it's your count that votes.
- 19. When cannibals ate a missionary, they got a taste of religion.
- 20. If you jumped off the bridge in Paris, you'd be in Seine.
- 21. A vulture boards an airplane, carrying two dead raccoons. The stewardess looks at him and says, 'I'm sorry, sir, only one carrion allowed per passenger.'
- 22. Two fish swim into a concrete wall. One turns to the other and says 'Dam!'
- 23. Two Eskimos sitting in a kayak were chilly, so they lit a fire in the craft. Unsurprisingly it sank, proving once again that you can't have your kayak and heat it too.
- 24. Two hydrogen atoms meet. One says, 'I've lost my electron.' The other says 'Are you sure?' The first replies, 'Yes, I'm positive.'
- 25. Did you hear about the Buddhist who refused Novocain during a root canal? His goal:

transcend dental medication.

26. There was the person who sent ten puns to friends, with the hope that at least one of the puns would make them laugh. No pun in ten did.



GSLC MEMBERS IN ACTION

Volunteer Spotlight: Reduce, Reuse, Record August 10, 2022

member Sp-tlight



Walter Yu Co-Captain, Open Fresno/Code for Sacramento



Mary C Norris
Co-Captain, Open
Fresno/Code for
Sacramento



Dan Fey
Co-Captain,
Open
Fresno/Code
for Sacramento

Members of our groups are aware of and similarly impacted by litter and water issues where we live. It's been helpful to merge our talents because our technical skillsets complement each other.



Waste is one of the biggest environmental challenges facing us today—and how we thoughtfully manage the growing amount of it is a shared challenge for communities across the country. Litter can wreak havoc on local ecosystems, and some states, including California, are trying to address the problem by passing regulations that require municipalities to maintain an acceptable level of cleanliness—but measuring trash in the environment can be difficult. Classical measurement techniques require surveyors with pen and paper to manually quantify every piece of trash at a site. This method is time-consuming and inefficient. Data could make that easier. Recently, Code for America Brigades in Sacramento and Fresno, CA have been working in partnership with nonprofit and government partners to create new systems of trash classification and management. The result, IrrashAl.org is an open-source web application leveraging artificial intelligence (AI) to help scientific researchers, municipalities and citizen scientists address litter and its environmental impacts.

Tell us a little about how you got involved with the Brigade Network, and how this project came together.

Walter: I got involved with Brigade Network in the fall of 2018 through the Sacramento Brigade and grew my role from volunteer to core team member, then Co-Captain. Trash AI was proposed by Win Cowger, a research scientist with the Moore Institute for Plastic Pollution Research, when I was reaching out to my professional network for project ideas. Along with Win, I'm a part of the California Trash Monitoring Workgroup, which is organized by the California Water Board to establish methods, policies, and tools to address litter statewide and has a subcommittee dedicated to leveraging data and technology to address litter.

Dan: I joined Code for Sacramento after moving here in January 2019. I wanted to meet likeminded friends and use my engineering skills to help the community. I was instantly hooked and continued helping the group, becoming co-captain in the fall of 2020. I've been helping with the technical design and project management of TrashAI.

Mary: I've been a Co-Captain of Open Fresno since 2020. I met Dan as a part of our Network ReVisioning Peer-to-Peer interviews last year. Towards the end of 2021, I started attending Code for Sacramento meet-ups and noticed they could use help. I then started advocating for others to get involved; for example, I met and recruited one of our volunteers, Steven Hollingsoworth, at a linux meetup, and he has since put in hundreds of hours into the code base and pretty much single handedly wrote the entire front-end and back-end application. After going to a trash monitoring meeting with Walter and Win, I realized this project could make a big impact for scientific researchers and our environment.

Why is it so important that we pay attention to litter? How has it traditionally been monitored and handled? Walter: Litter is

a huge problem in urban and rural areas worldwide. The buildup of trash has so many detrimental effects—just think about what happens when it rains and pollutants that bind to trash are transported to waterways that support entire cities. Once trash enters waterways, it can harm wildlife that ingest it, smother vegetation, and reshape landscapes. Every community is affected by this communal challenge.

Mary: Here in the Central Valley of California, the effects that litter has on the natural environment are even more pronounced. As one of the largest agricultural suppliers of almonds, grapes, and other produce, our water is a precious resource. How can we ensure that litter is being monitored appropriately? It's a difficult problem when litter can be as small as a few rumpled napkins or as big as some discarded household appliances. With traditional measurement methods, surveyors map out litter for removal with a pen and paper, an inefficient and often incomplete way to track trash. With growing populations, trash increases and the need to address trash efficiently is also increased.



What's unique about the TrashAI approach?

Walter: An increasing number of scientific researchers, surveyors, volunteers, and community scientists are incorporating digital images to track the prevalence and distribution of trash observed during field surveys and litter cleanup events. More and more of them are also using AI to analyze these images—but what's unique about Trash AI is its open-source framework. Trash AI lowers the barrier to entry for researchers, municipalities, and citizen scientists to quantify trash in the environment. It leverages computer vision and an easy-to-use website which allows users to batch upload digital images of litter, analyze the types and quantities of trash in all of their images, and download their results.

Dan: This is something that I've learned from Win Cowger, a colleague of Walter's at the California Water Board Trash Monitoring Workgroup. He's helped us see that, although there are many artificial intelligence (AI) algorithms developed for trash classification, none are readily accessible to the average litter researcher. Running AI algorithms can be difficult to deploy without data science experience and often run on expensive cloud servers/services. Our system alleviates these obstacles by using a browser-side AI framework (TensorFlow.js) and a modern web user interface to allow anyone who wants help their community run our AI algorithm with a simple photo upload. Additionally, since our project is open source on Github, our system may be freely copied and adapted for other AI use cases.

Were there any impactful partnerships in this project? How did you build and network the connections needed to make Trash AI effective?

Walter: We were able to present this project at monthly meetings of the California Water Board Trash Monitoring Workgroup. The workgroup consists of stakeholders from regulatory agencies, state and local agencies, researchers, and citizen scientists. We've been able to partner by asking for feedback between project software development sprints. For example, we implemented features to map litter locations from metadata included with uploaded photos, allow users to manually correct misclassified photos (e.g. litter not being detected or mislabeled) and increase the number of available labels for classifying litter in photos.

Mary: An impactful partnership has also been the collaboration between Code for Sacramento and Open Fresno. Members of our groups are aware of and similarly impacted by litter and water issues where we live. It's been helpful to merge our talents because our technical skill-sets complement each other.

How could Trash AI change the environment in your community? Where do you hope this project goes from here?

Walter: This project is raising awareness of trash in the environment—and our hope is that raising awareness will ultimately help change the public's behaviors and attitudes towards littering. We also want to recognize that addressing litter and environmental degradation is a social justice issue. Reducing litter will reduce the pollution burden on Black, Indigenous, and People of Color (BIPOC) communities and communities with low income, which often experience higher levels of pollutants in their neighborhoods. The California Environmental Protection Agency (CalEPA) has partnered with the Office of Environmental Health Hazard Assessment (OEHHA) to create the CalEnviroScreen tool to track these effects. In addition, this project helps develop additional trash data. There are many studies involving computer vision, AI, and trash identification in images, so such data will be a valuable resource. Just one example is the Trash Annotations in Context (TACO) dataset, which was used to develop the Trash AI model and has over 40 academic citations in the past year alone. We hope to make our model more useful to the scientific community soon by expanding annota-

source. Just one example is the <u>Trash Annotations in Context (TACO) dataset</u>, which was used to develop the Trash AI model and has over 40 academic citations in the past year alone. We hope to make our model more useful to the scientific community soon by expanding annotations to include <u>trash taxonomy classes</u> and building a user interface that allows people to edit and improve the annotations currently predicted by the model. We're also working in collaboration with the TACO development team to improve workflow integration to get the data that users share to the Amazon Web Services (AWS) S3 bucket into the TACO training dataset and trained model.

What would you like other volunteers to learn from your experience working on this project?

Mary: I would like other volunteers and Brigade leaders to learn that collaboration between Brigades is possible—and more than that, it's hugely beneficial. You don't have to go so far as we have, co-captaining each other's Brigades, but working across groups opens up the possibility of experimenting with bigger and more impactful ideas. Collaborating with another Brigade could make that project—that one you're thinking of throwing in the towel on—a reality.

Walter: What's been so fascinating about this project is that it requires such a diverse set of skills including user experience, machine learning (computer vision), trash-related research, web application deployment (devops), and project management. We didn't have all these skills on hand at the beginning of the project. We had to build a communal skillset through cross-Brigade collaboration, recruitment, and outreach to experts in the field. We learned a lot in the process of creating the team for this project, and grew individually and together through such a collaborative working process that found a place for each person's unique contributions.

Notes of Gratitude



To Our Good Shepherd Family,

There is no measure to the comfort we have received from your phone calls, cards, notes, thoughts and prayers following the death of our great-granddaughter, Erika Brisendine.

Obviously, we are dealing with the tragedy with grief but also with thanks to our loving God who gave us twenty years of wonderful memories from being part of her life. What a blessing!

Thanks for being there for us.

Neil and Verna Walden Family





Happy Halloween

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						8AM - 1PM LHN Market, International Worship Ct. 9AM - 12PM Girls Scouts (Comm Ctr)
2 • 10AM Worship Service • 11AM Coffee Social (Jacobson Hall)	 9AM - 4PM BIA (Conf Rm & Fireside Rm) 5PM - 10PM Boy Scouts (Comm Ctr) 6PM Esther Circle (Fireside Rm) 	 4 • 9AM - 4PM BIA (Conf Rm & Fireside Rm • 6PM - 10PM Voices United (Comm Ctr) 	5 • 9AM - 4PM BIA (Conf Rm & Fireside Rm)	6 • 9AM - 4PM BIA (Conf Rm & Fireside Rm)	7 • 9AM - 4PM BIA (Conf Rm & Fireside Rm)	∞ •
10AM Worship Service 11AM Coffee Social (Jacobson Hall)	 10 8AM - 5PM FUSD (Jacobson Hall) 9AM - 4PM BIA (Conf Rm & Fireside Rm) 5PM - 10PM Boy Scouts (Comm Ctr) 	 11 9AM - 4PM BIA (Conf Rm & Fireside Rm 10AM Ruth Circle (TBA) 6PM - 10PM Voices United (Comm Ctr) 	12 • 9AM - 4PM BIA (Conf Rm & Fireside Rm)	13 • 9AM - 4PM BIA (Conf Rm & Fireside Rm)	14 • 9AM - 4PM BIA (Conf Rm & Fireside Rm)	• 10AM - 12PM Roeding School Sports
 16 10AM Worship Service 11AM Coffee Social (Jacobson Hall) 2PM Pet Blessing, Court Yard 4PM GSLC Book Club 	• 9AM - 4PM BIA (Conf Rm & Fireside Rm) • 5PM - 10PM Boy Scouts (Comm Ctr)	18 • 9AM - 4PM BIA (Conf Rm & Fireside Rm • 6PM - 10PM Voices United (Comm Ctr)	19 • 9AM - 4PM BIA (Conf Rm & Fireside Rm)	20 • 9AM - 4PM BIA (Conf Rm & Fireside Rm) • 5:30PM Council Meeting (Conf Rm)	21 • 9AM - 4PM BIA (Conf Rm & Fireside Rm) • 5PM - 10PM Set Up Spaghetti Dinner (Jacobson Hall)	22 • All Day Memorial Garden Spaghetti Dinner (Jacobson Hall)
2310AM Worship Service11AM Coffee Social (Jacobson Hall)	• 9AM - 4PM BIA (Conf Rm & Fireside Rm) • 5PM - 10PM Boy Scouts (Comm Ctr)	• 9AM - 4PM BIA (Conf Rm & Fireside Rm • 6PM - 10PM Voices United (Comm Ctr)	• 9AM - 4PM BIA (Conf Rm & Fireside Rm)	• 9AM - 4PM BIA (Conf Rm & Fireside Rm)	28 • 9AM - 4PM BIA (Conf Rm & Fireside Rm)	29
30 Reformation • 10AM Worship Service • 11:30AM Pumpkin Carving/Potluck (Jacobson Hall)	 31 Halloween 9AM - 4PM BIA (Conf Rm & Fireside Rm) 5PM - 10PM Boy Scouts (Comm Ctr) 	HAPPY HALLOWEEN				



