

Creating partnerships for protecting our water sources, wildlife and public health

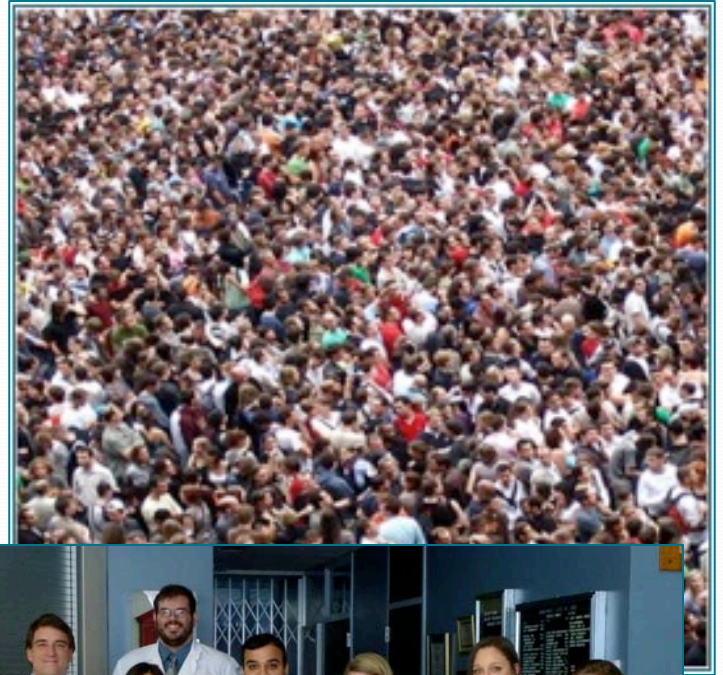
Anna McCartney
Pennsylvania Sea Grant



Audience:

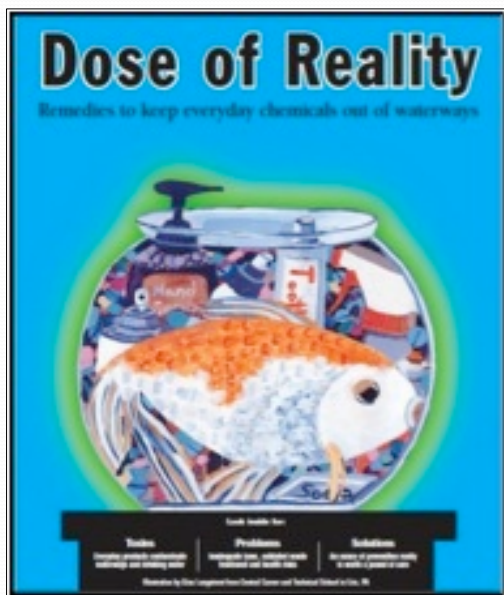
- ◆ General public
- ◆ College Students
- ◆ Health Care Professionals

Teach others to spread the word!



Resources

News In Education newspaper inserts



Billboards



NIE newspaper pages



Workshops/power point presentations



Dose of Reality

Remedies to keep everyday chemicals out of waterways



Look inside for:

Toxins

Everyday products contaminate waterways and drinking water

Problems

Inadequate laws, outdated waste treatment and health risks

Solutions

An ounce of prevention really is worth a pound of cure

Illustration by Gina Longstreet from Central Career and Technical School in Erie, PA

Burden of PPCP Pollution

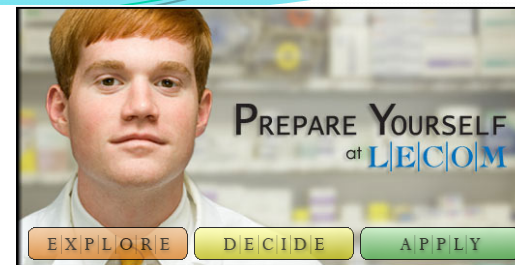
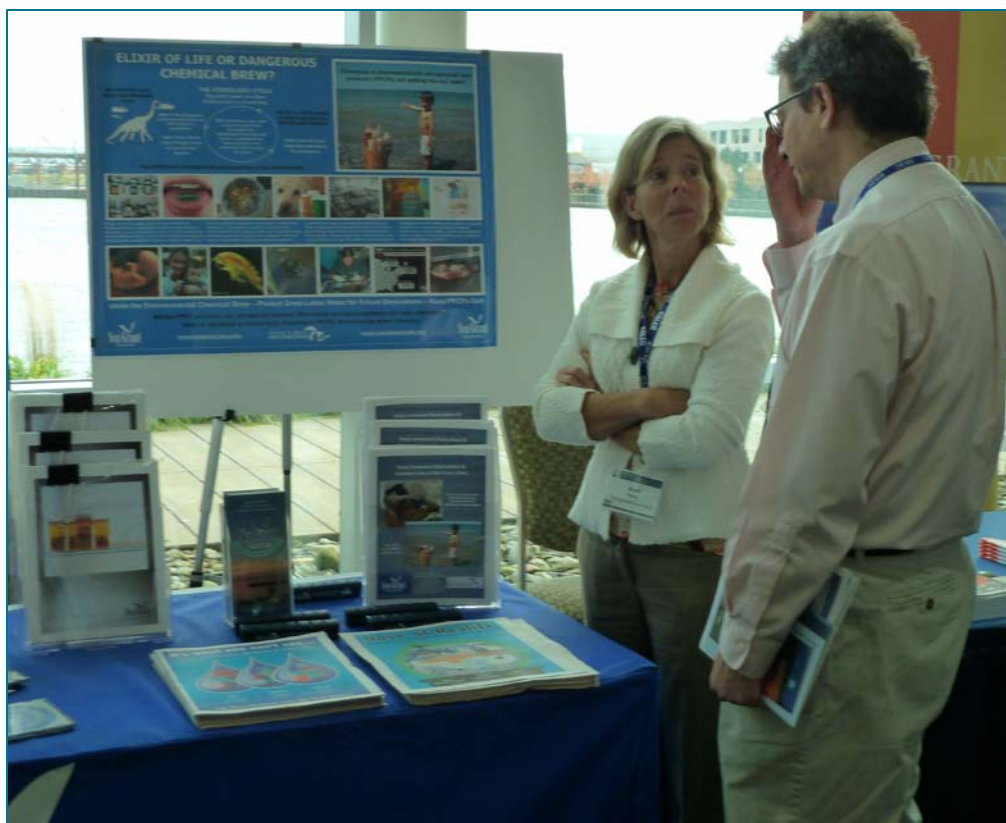
Presentation for Health Care Professionals

Anna McCartney
Communication and Education Specialist


Sea Grant
Pennsylvania

 **Great Lakes RESTORATION**  **Sea Grant**
Great Lakes Network

Other Publications and Posters/events



I want to find...

Browse...

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Links
Job Openings

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Millcreek Health Systems Affiliates

Millcreek Community Hospital
LECOM
Medical Associates of Erie
LECOM Medical Fitness and Wellness Center
Lake Erie Consortium for Osteopathic Medical Training
LECOM Center for Drug Information & Research

LECOM Research Collective
Millcreek Manor



LECOM medication disposal event prevents drugs from entering the Lake Erie water supply

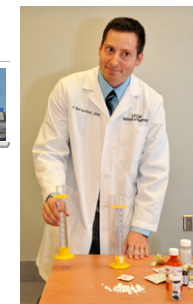
Hundreds of pounds of medications that could have ended up in landfills, flushed into the sewage system, or ended up in the hands of children went to an incinerator for safe disposal following a medication take-back event in Erie.

The Lake Erie College of Osteopathic Medicine School of Pharmacy and Pennsylvania Sea Grant sponsored a medication recovery and disposal event on Saturday Aug. 20. LECOM School of Pharmacy faculty members and students collected unwanted and expired medications at the LECOM John M. & Silvia Ferretti Medical Fitness and Wellness Center in Erie, Pa.

More than 100 citizens brought in unused over-the-counter medications, supplements, prescription drugs, and controlled substances. LECOM pharmacy students sorted the loose pills, caplets, vials, and solutions and asked patients why the medications were not ingested. The information will help them determine which medications are not being used and the reasons why.



These are some of the unwanted and expired medications collected during the medication recovery and disposal event held Aug. 20 at the LECOM Medical Fitness & Wellness Center.



Elliott Cook, Pharm.D., LECOM School of Pharmacy Assistant Professor, explains how discarded medications can get into the water

LECOM School of Pharmacy assistant professor Elliott Cook, Pharm.D., said the improper disposal of medications is a major problem. He said many patients throw unwanted medications in the garbage or flush them down the toilet, which is not recommended. "The majority of pharmaceuticals are carbon compounds that can leak into our environment or the water supply," Dr. Cook states.

In addition to environmental concerns, unused medications sitting in home medicine cabinets can create patient safety issues and lead to substance abuse. Dr. Cook said seventy percent of those who abuse drugs started by getting their drugs from the medicine cabinets of friends or relatives.

Pennsylvania Sea Grant has co-sponsored three medication collection events with the LECOM School of Pharmacy since April

Recent News

Record number of LECOM students participate in Bridging the Gaps program
LECOM medication disposal event prevents drugs from entering the Lake Erie water supply

Classes begin for LECOM School of Pharmacy Students
AOA President visits with LECOM medical students
Pa. Secretary of Health visits LECOM

LECOM welcomes new medical students; launches new physician assistant pathway
Construction closes LECOM Erie north entrance
LECOM Commencement Dates 2011-2020

LECOM School of Dental Medicine Receives Initial Accreditation

LECOM Connection Available Online

LECOM provides easier access to news items

Sign up now for LECOM Campus Security alerts

LECOM News Archives

LECOM News RSS

Events Calendar

Aug 2011													
S	M	T	W	T	F	S							
31	1	2	3	4	5	6							
7	8	9	10	11	12	13							
14	15	16	17	18	19	20							
21	22	23	24	25	26	27							
28	29	30	31	1	2	3							

Upcoming Events

LECOM Erie Events

LECOM Bradenton Events

9/1 - 12:00am10/4 - 12:00am
Registration underway for Human Body Explored Program

3 reasons PPCP use should matter to you



**$\leq 1\%$
freshwater
is usable for
humans
and
organisms
that rely on
it**

**7 billion
people/
unknown
population
of
countless
species**

**No
usable
water
NO
LIFE!**



PPCP toxins everywhere

**Prescription and over the counter
pharmaceuticals for humans**

**Prescription and over the counter
pharmaceuticals for pets**

**Concentrated Animal
Feeding Operations, CAFOs**

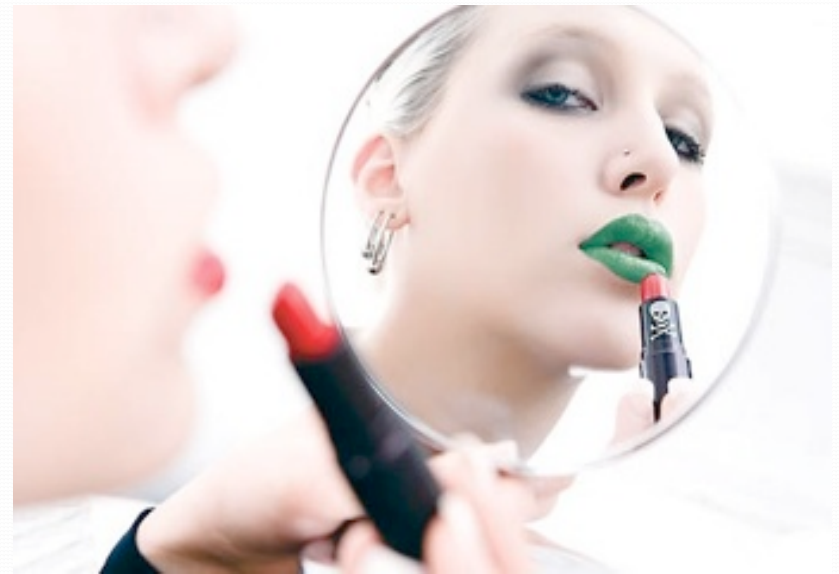
**Personal Care
Products**

Personal Care Products, PCPs



**Men on average use
6 products daily
with 85 unique
ingredients**

**The average woman
in the US uses 12
products containing
168 unique
ingredients daily**



- 
- "Pharmaceuticals are new pollutants. What makes them different is that the whole point of a drug is to have a very targeted effect from the lowest dose possible."

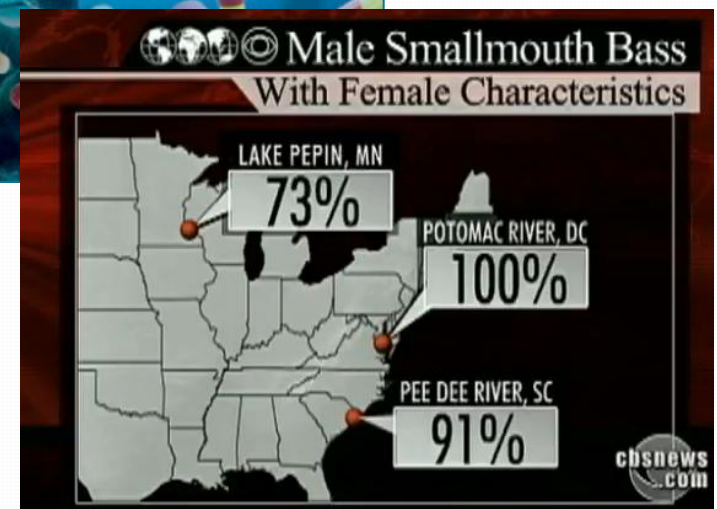
-Yves Levi of the University of Paris-Sud

- "Doctors and pharmacists should keep in mind the potential for unintended exposure. Drug waste in water is like doctors prescribing a cocktail of unknown medications to healthy people at random."

- Christian Daughton of the U.S. Environmental Protection Agency,



Will the water that has sustained life for millions of years be able to sustain future generations?



CHEMICALS TO AVOID:

- 2-BROMO-2- NITROPROPANE-1,3-DIOL
- BHA
- DMDM HYDANTOIN
- OXYBENZONE
- TRICLOSAN
- BORIC ACID & SODIUM BORATE
- DIBUTYL PHTHALATE & TOLUENE
- FRAGRANCE
- DYES.
- CETEARETH & PEG compounds
- PARABENS
- TRIETHANOLAMINE (TEA)
- BENZYL & ISOPROPYL ALCOHOL
- METHYLCHLOROISOTHIA- ZOLINONE
- METHYL- ISOTHIAZOLINONE
- IODOPROPYNYL BUTYLCARBAMATE

Let nature work its magic on your feet! bodysource® Botanicals Foot Lotion uses shea butter to help moisturize while our botanical blend gives tired feet the invigorating boost they need!



SHEA BUTTER
moisturizes



TEA TREE OIL
rejuvenates and naturally deodorizes



PEPPERMINT OIL
cleanses and rejuvenates



BAKING SODA
eliminates odor

To Use: Apply generously to feet as needed. For best results, exfoliate rough skin with bodysource® Botanicals Foot Scrub then follow with our foot lotion.

INGREDIENTS: WATER, ISOPROPYL PALMITATE, CETYL ALCOHOL, CETEARETH-20, STEARYL ALCOHOL, DIMETHICONE, SODIUM BICARBONATE, ALOE BARBADENSIS GEL, MENTHA PIPERITA (PEPPERMINT) OIL, MELALEUCA ALTERNIFOLIA (TEA TREE) OIL, STEARETH-2, PROPYLENE GLYCOL, BUTYROSPERMUM PARKII (SHEA BUTTER) FRUIT, GLYCERIN, TOCOPHEROL, FRAGRANCE, DMDM HYDANTOIN, TETRASODIUM EDTA, CYCLOPENTASILOXANE, MENTHOL, IODOPROPYNYL BUTYLCARBAMATE, CARBOMER, BHT, TRIETHANOLAMINE.

CAUTION: FOR ADULT USE ONLY. FOR EXTERNAL USE ONLY. KEEP OUT OF REACH OF CHILDREN AND PETS.

Not Tested on Animals • Please Recycle ♻️



Chemicals to avoid and the reasons why you should avoid them:

- 2-BROMO-2- NITROPROPANE-1,3-DIOL: Allergen that forms cancer- causing chemicals
- BHA: Causes skin depigmentation
- DMDM HYDANTOIN: Allergen that forms cancer-causing chemicals
- OXYBENZONE: Allergen; forms free radicals to damage skin
- TRICLOSAN: May disrupt growth hormones from the thyroid
- BORIC ACID & SODIUM BORATE: Unsafe for infants according to industry experts
- DIBUTYL PHTHALATE & TOLUENE: Found in nail polish/ play makeup; hormone disruption, cancer concerns
- FRAGRANCE: Allergen; neurotoxin (affects brain and nervous system), hormone disruption concerns
- DYES: Some cause cancer and are banned outside the U.S.
- CETEARETH & PEG compounds: Can contain cancer-causing impurities
- PARABENS: Hormone disruption, cancer concerns
- TRIETHANOLAMINE (TEA): Allergen that forms cancer- causing chemicals
- BENZYL & ISOPROPYL ALCOHOL: Skin irritation and neurotoxicity concerns
- METHYLCHLOROISOTHIA- ZOLINONE & METHYL- ISOTHIAZOLINONE: Allergens with neurotoxicity concerns
- IODOPROPYNYL BUTYLCARBAMATE: Chemically similar to neurotoxic pesticides

This list is included in our resources and available from Environmental Working Group

**70% of
medications
are prescribed
for
preventable
illnesses**

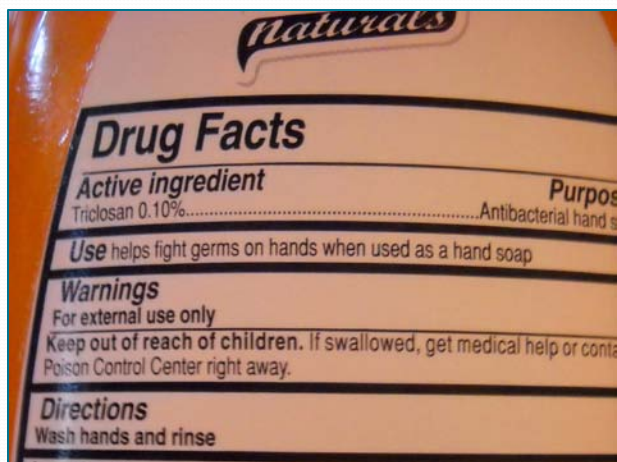


Photo Anna McCartney PA Sea Grant

The Solutions



Would we use PPCPs with more caution if we knew how chemicals in PPCPs affect the environment/health?



Shouldn't labels have environmental warnings too? ... like...

“This pesticide may contribute to antibiotic resistance in bacteria and is harmful to fish and other wildlife because it is an endocrine disruptor.”

Read the labels



Choose wisely



The Domino Effect & Purchasing Power

Partnerships exponentially increase number of people reached.

If people stopped purchasing personal care products with harmful chemicals and started taking better care of their health wouldn't we see immediate results?





**The quality of our
local creeks, Great
Lakes, our ocean,
our drinking water
and our health is
linked to our
choices.**

ERIE TIMES-NIE/GREAT LAKES SEA GRANT NETWORK: HIDDEN CHEMICALS IN YOUR WATER

Undo the environmental chemical brew

Protect Great Lakes water for future generations



Keep the chemicals in pharmaceuticals and personal care products (PPCPs) out of the environment!

**Monitor PPCP purchase, use, storage and disposal.
Read labels, reduce use and replace products with safer alternatives.
Insist on standards that avoid toxic chemicals and encourage green chemistry.**

