# Annual USTUR Advisory Committee Meeting

May 9, 2008

Richard R. Brey, Ph.D., C.H.P.

Professor of Physics/ Director ISU Health Physics Program

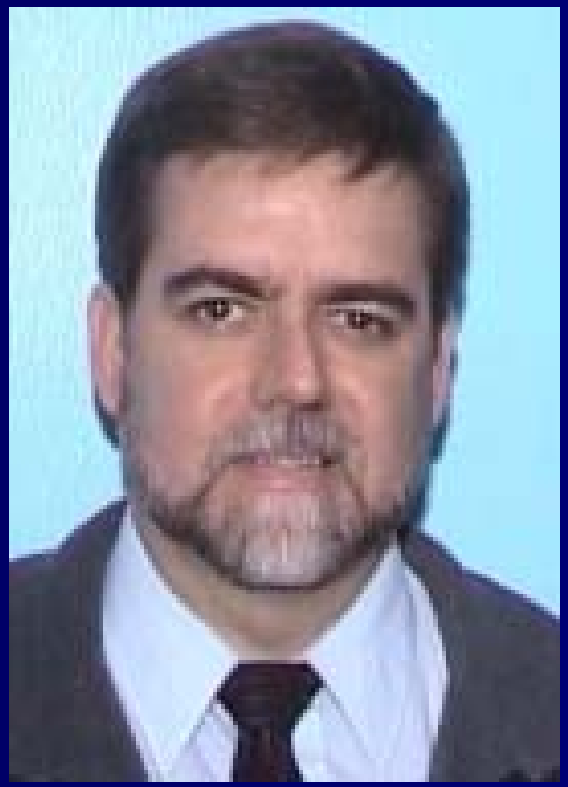
# The USTUR - ISU Collaboration

- Collaboration begins to build momentum
- Much effort has gone into:
  - Reviewing the USTUR data base and improving its content
  - Developing expertise in internal dosimetry
- We anticipate the graduation of two M.S. students and one Ph.D. student this spring

# Liesl Germann M.S.

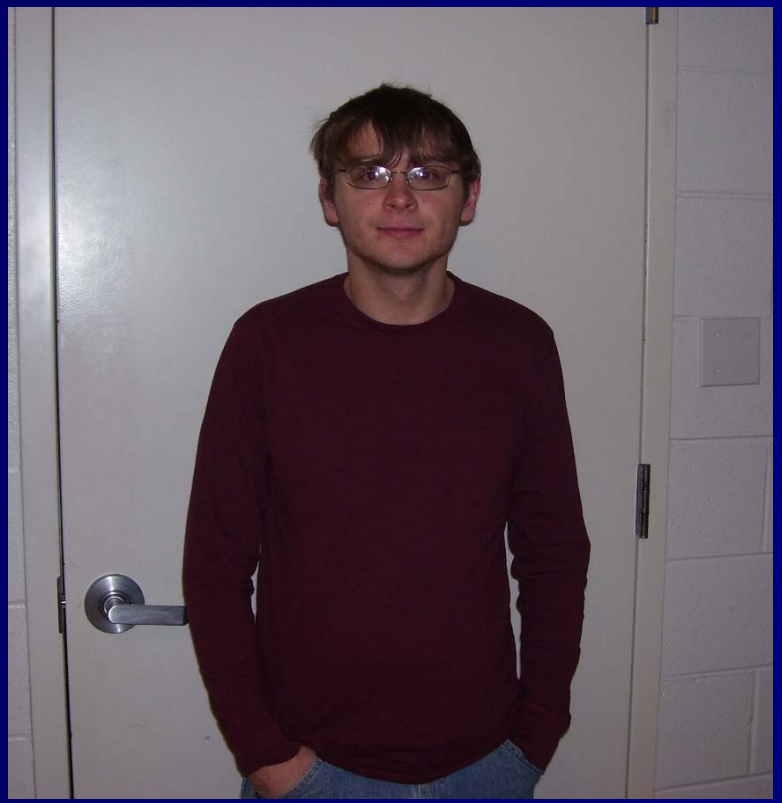
- Liesl Germann
- M.S, Health Physics
- Considering NCRP Wound Model Using USTUR cases 262, 344, and 151
- Presented Poster last year at Annual HPS meeting comparing the empirical resolution of case 252 to the wound model

# Dan Mecham M.S.



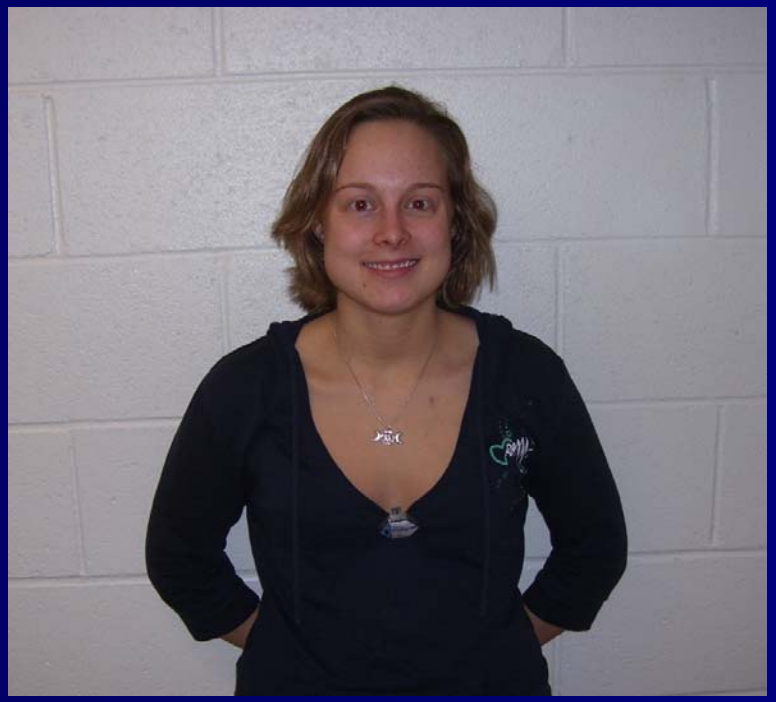
- Dan Mecham
- M.S. Health Physics
- Working with James Brey, and Shonka considering magnitude of Pu in members of the general public in region of Los Alamos from 1950s through today
- Evaluating if the reanalysis of registry tissue using current techniques with much better sensitivity would be cost effective in terms of providing real activity information rather than non-detectable.

# Travis Matthews M.S.



- Travis Matthews
- M.S. Health Physics
- Considering and improving the validity of the extrapolation of skull and patella external measurements to bone deposition estimates.

# Erika Shelton M.S.



- Erika Shelton
- M.S. Health Physics
- Staring project to evaluate the NCRP wound model for wounds involving more soluble forms of Pu.

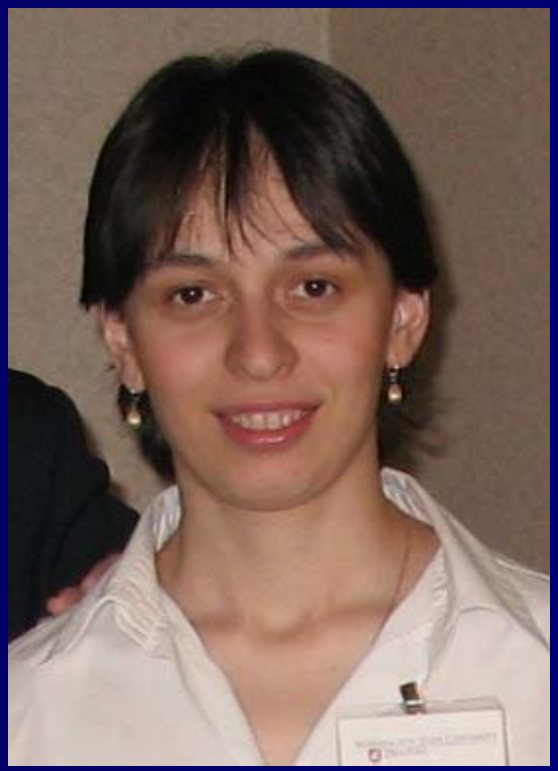
# Robert Acha Ph.D.


- Robert Acha
- Ph.D. Health Physics
- Preparation for comprehensive examination
- Project undefined

# Maia Avtandilashvili Ph.D.

- Maia Avtandilashvili
- Ph.D. Health Physics
- Has evaluated a great many USTUR registrant cases.
- Writing case summaries for each case evaluated
- Interested in defining the translocation kinetics associated with inhalation of the apparent class Super S -high fired Pu from the Rocky Flats fire.
- Considering improvements in the definition of and acceptable ranges for default translocation parameters throughout the ICRP models relevant to proposed probabilistic dosimetry schemes rather than current deterministic approaches

# Nino Chelidze Ph.D.

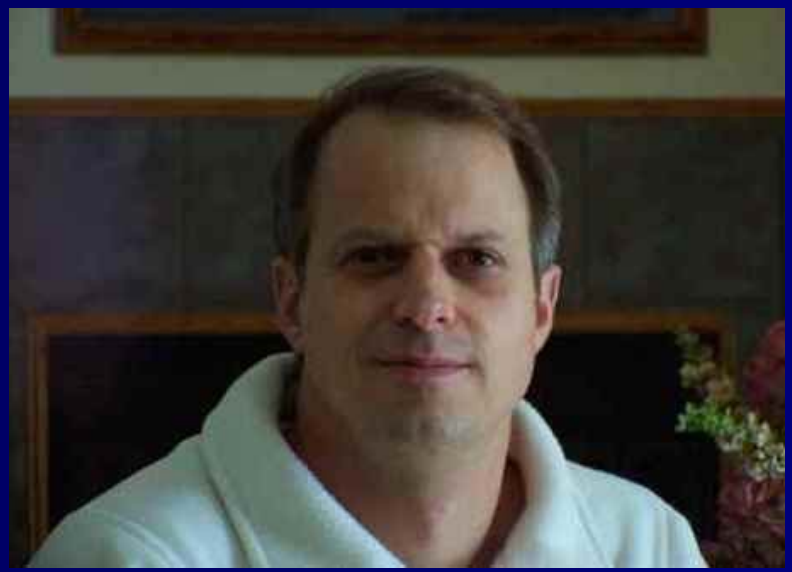


- Nino Chelidze
- Ph.D. Health Physics
- Considering improvements in the definition of and acceptable ranges for default translocation parameters throughout the ICRP models.
- Developing software algorithms that helps define most probable and distribution information on ranges of various translocations parameters used in ICRP models based upon USTUR registrant data

# Nazi Fallahian Ph.D.

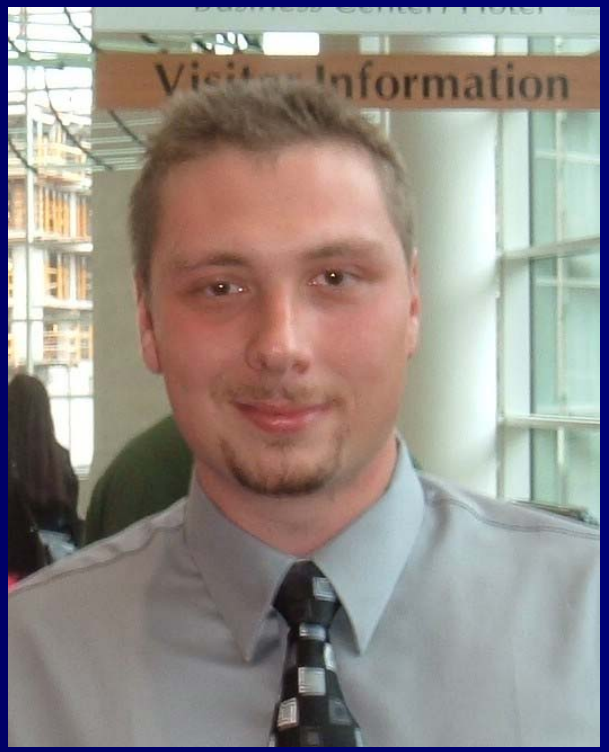
- Nazi Fallahian
- Ph.D. Health Physics
- Conducting epidemiological investigation of USTUR data base

# Morris Hall  Ph.D.



- Morris Hall
- Preparation for comprehensive examination
- Project undefined

# George Tabatadze PhD.




- George Tabatadze
- Ph.D. Health Physics
- Preparation for comprehensive examination
- Project undefined but considering voxel modeling of case 0102.

# Kevin Claver M.S.

- Kevin Claver
- M.S. Health Physics
- Interested in performing detailed gamma spectroscopic analysis of Am-241 concentrations in soft tissue mostly associated with case 0846.