A tale of research, teaching, mentoring, and industry collaboration.

Francesco Tiezzi

DIVISIONE AMMINISTRATIVA
REPUBBLICA FEDERALE DI GERMANIA
AUSTRIA
SVIZZERA
FRANCIA
IUGOSLAVIA
MUNACO
MAR LIGURE
MARE ADRIATICO
MAR TIRRENO
MARE DI SICILIA
ALGERIA
TUNISIA
MALTA
VALLETTA
Circondari

University of Florence

- I° level degree in Agricultural Science (2006)
- II° level degree in Sustainable Animal Husbandry (2008)

ALGERIA
TUNISIA
SICILIA
MARE DI SICILIA
MALTA
VALLETTA

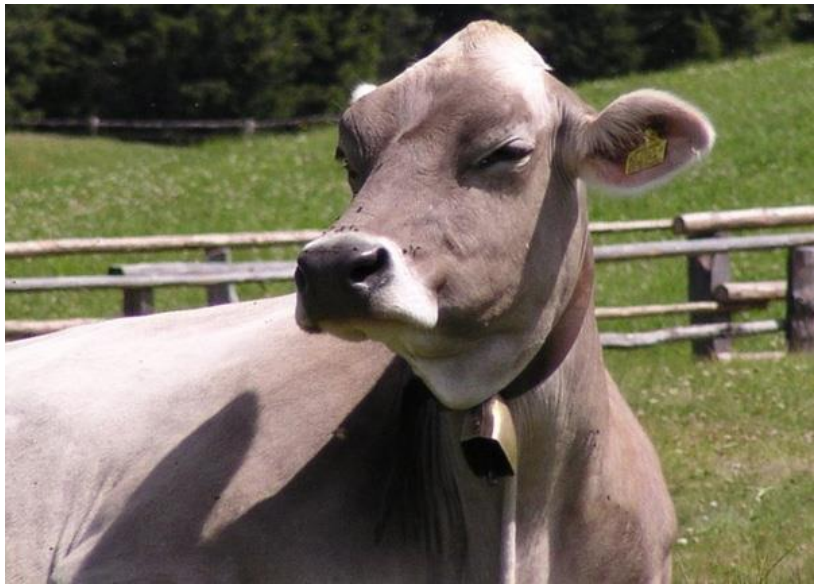
University of
Florence

$$\begin{bmatrix} 1'1 & 1'Z \\ Z'1 & Z'Z + G^{-1}\lambda \end{bmatrix} \begin{bmatrix} \hat{\mu} \\ \hat{u} \end{bmatrix} = \begin{bmatrix} 1'y \\ Z'y \end{bmatrix}$$

Class in
Genetic improvement and quantitative genetics of livestock

University of
Padua

Ph.D. SCHOOL ANIMAL & FOOD SCIENCE
UNIVERSITY OF PADOVA

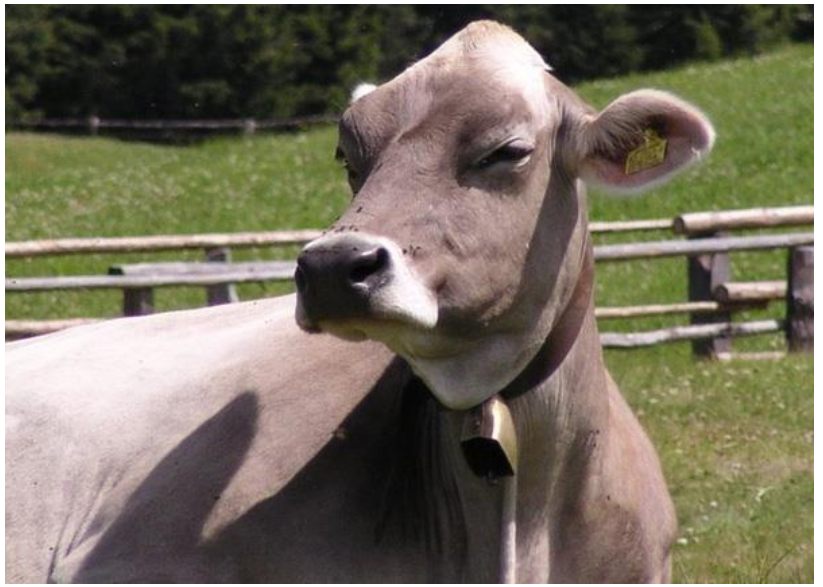


PhD in
Animal Breeding and Genetics (2012)

Mentor:
Prof. Giovanni Bittante

University of
Padua

Ph.D. SCHOOL ANIMAL & FOOD SCIENCE
UNIVERSITY OF PADOVA

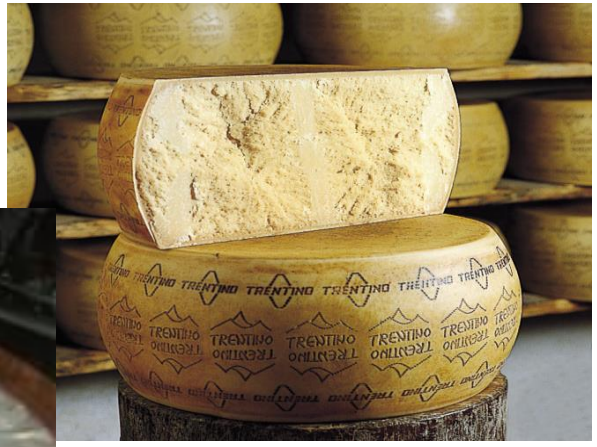


PhD in
Animal Breeding and Genetics (2012)

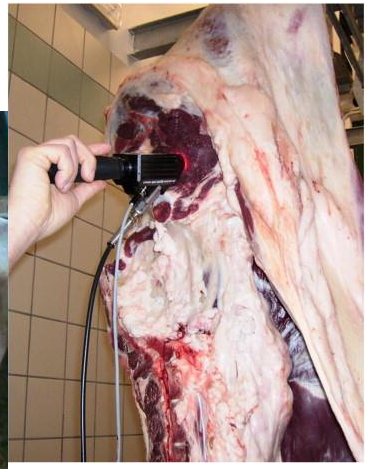
Mentor:
Prof. Giovanni Bittante

Visiting student at NC State (2010)

TRENTINO
TRENTINGRANA



Milk quality in the supply chain



Near-Infrared Spectroscopy (NIRS)

Postdoc (research)

North Carolina State University

Dr. Christian Maltecca

NC STATE UNIVERSITY Animal Science Department Genetics and Genomics

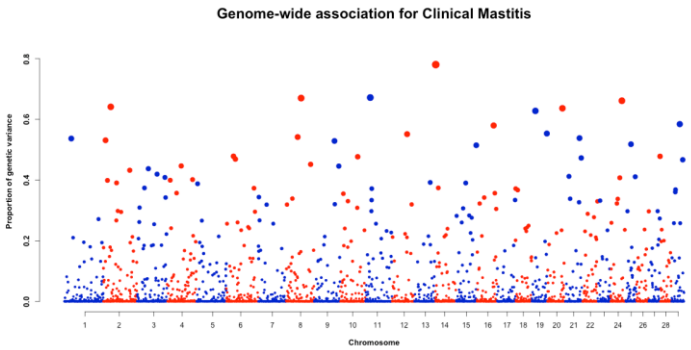
Postdoc (research)

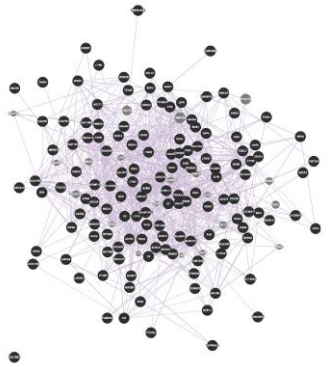
North Carolina State University

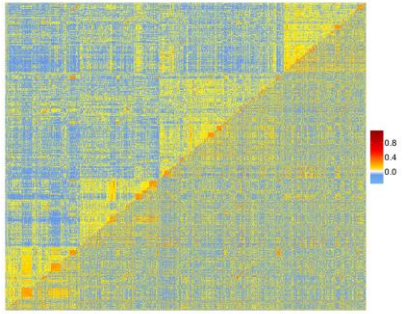
Dr. Christian Maltecca

NC STATE UNIVERSITY Animal Science Department Genetics and Genomics

- Research
- Graduate Students Support
- Teaching
- Industry application
- Collaborations
- Grant proposal writing







Research Assistant Professor:

North Carolina State University

Research Assistant Professor:

North Carolina State University

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North Carolina State University

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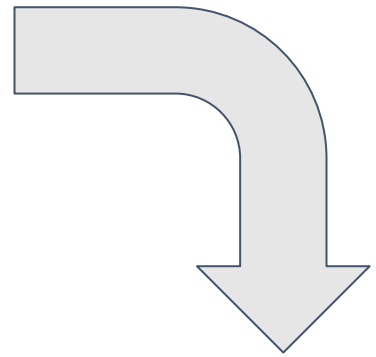
UNIVERSITAS
FLORENTINA

FLORENTINA STUDIORUM UNIVERSITAS



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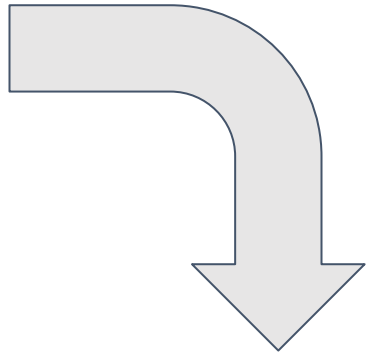

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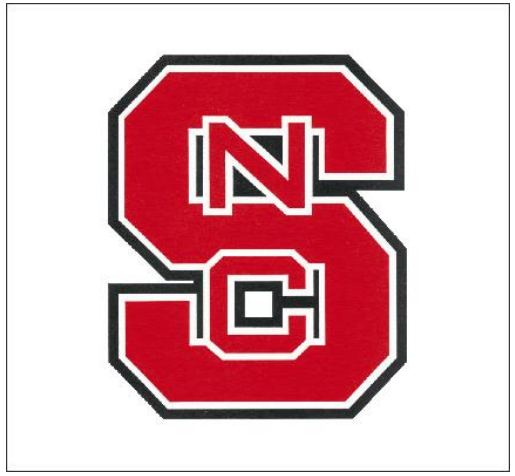

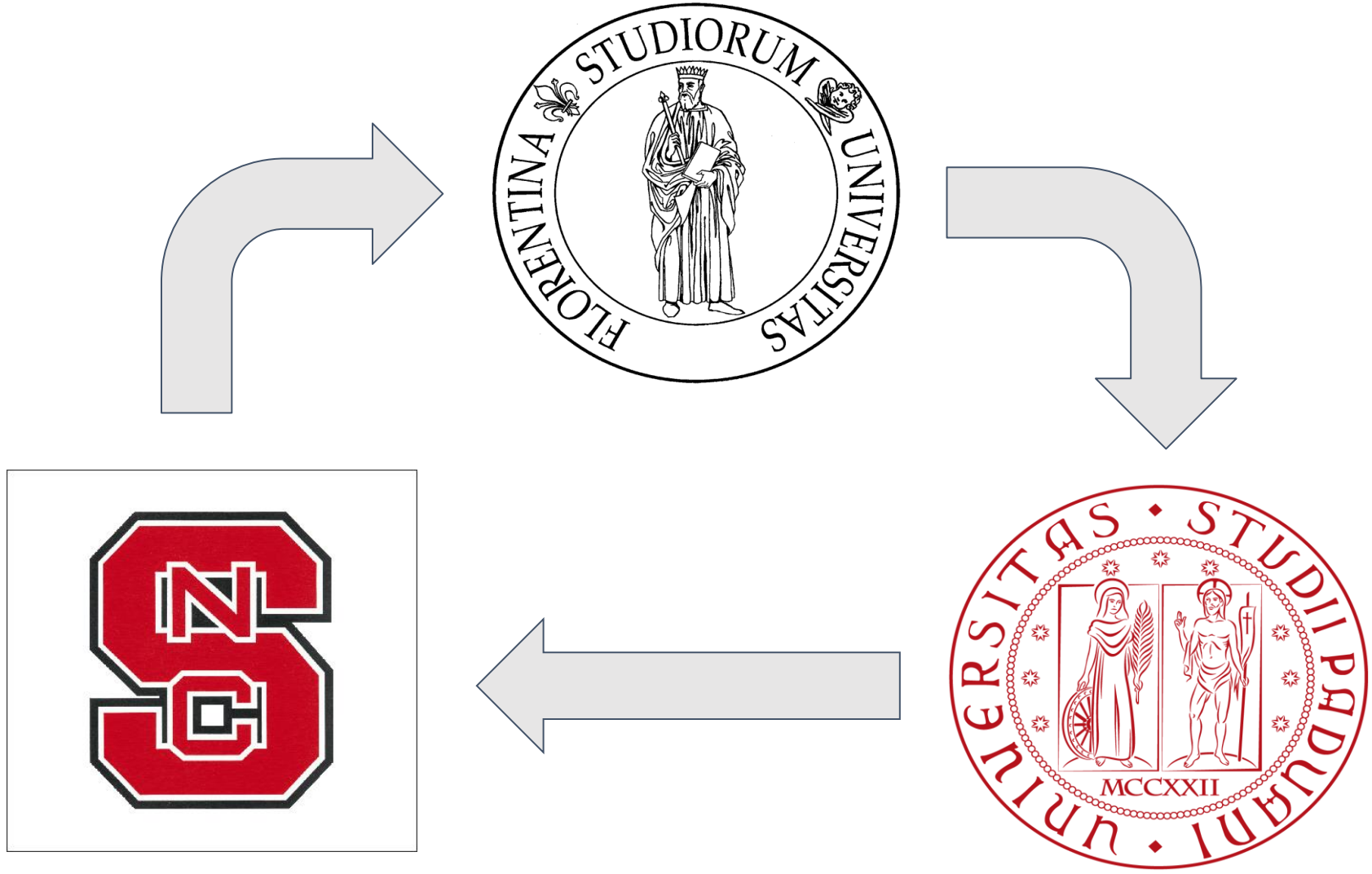
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FLORENTINA
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Three times I was glad that I had a doctorate

Three times I was glad that I had a doctorate from Italy

Academia

Academia

BRILL

PERSPECTIVES ON GLOBAL DEVELOPMENT AND TECHNOLOGY 16 (2017) 666-682

PERSPECTIVES ON GLOBAL DEVELOPMENT AND TECHNOLOGY

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Food Production or Food Distribution: The Key to Global Food Security?

Edward L. Kick
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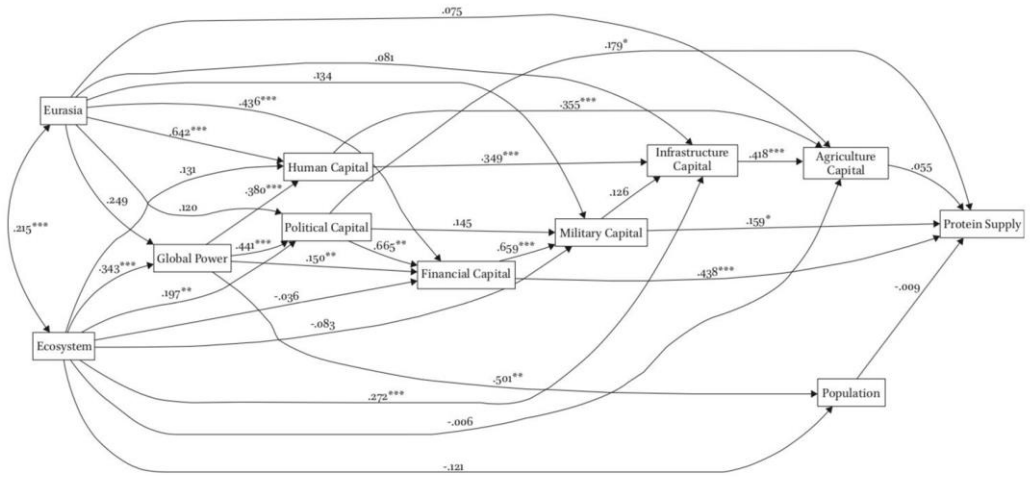
elkick@ncsu.edu

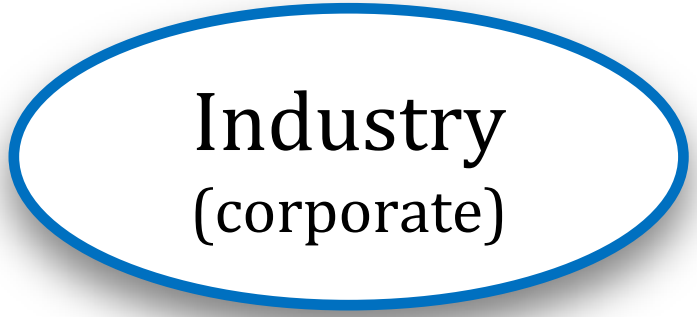
Francesco Tiezzi
Department of Animal Science, North Carolina State University
f_tiezzi@ncsu.edu

Diego Castedo Pena
Department of Mathematics, North Carolina State University
dcasted@ncsu.edu



NOTE: The numbers on each path if starred are statistically significant standardized coefficients representing the impact of the causal variables on the caused variables.

FIGURE 1 *Model of the causal antecedents of food security (daily protein consumption per capita).*


Industry
(corporate)

The Maschhoffs LLC.

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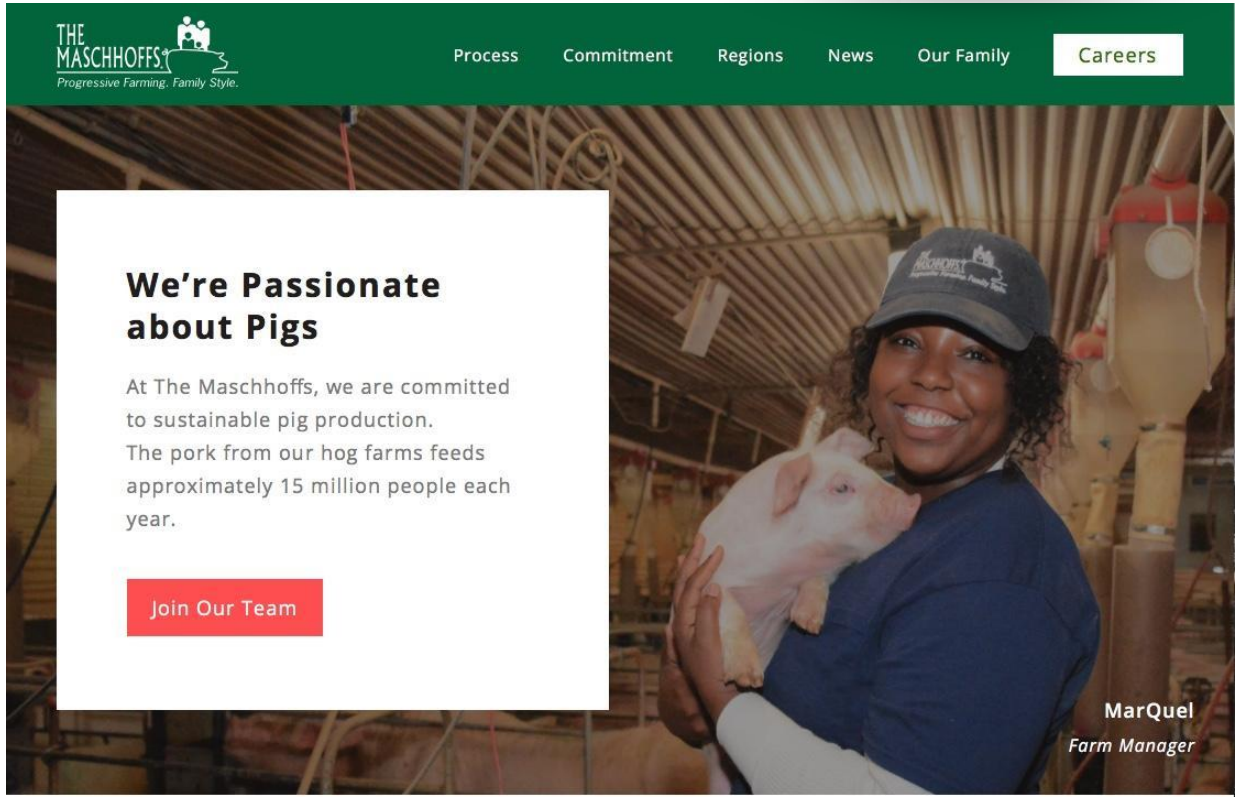
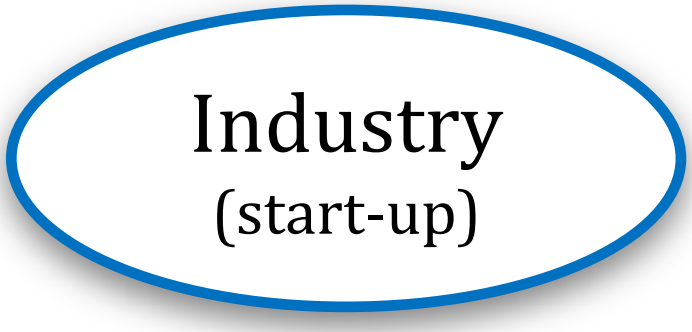
Industry
(corporate)

- Data Mining
- Improved Data-Capture systems
- Variance Components Estimation
- Breeding Value Estimation
- Selective Genotyping
- Genomic Evaluations
- New and Innovative traits




Industry
(start-up)

Industry
(start-up)

Advanced Animal Diagnostics

- Breeding value prediction for innovative traits

Let's get right to the point.

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Doctorate in Italy, doctorate in the US: how do they compare?

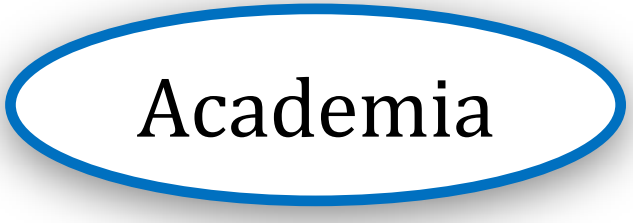
Doctorate in Italy, doctorate in the US: how do they compare?

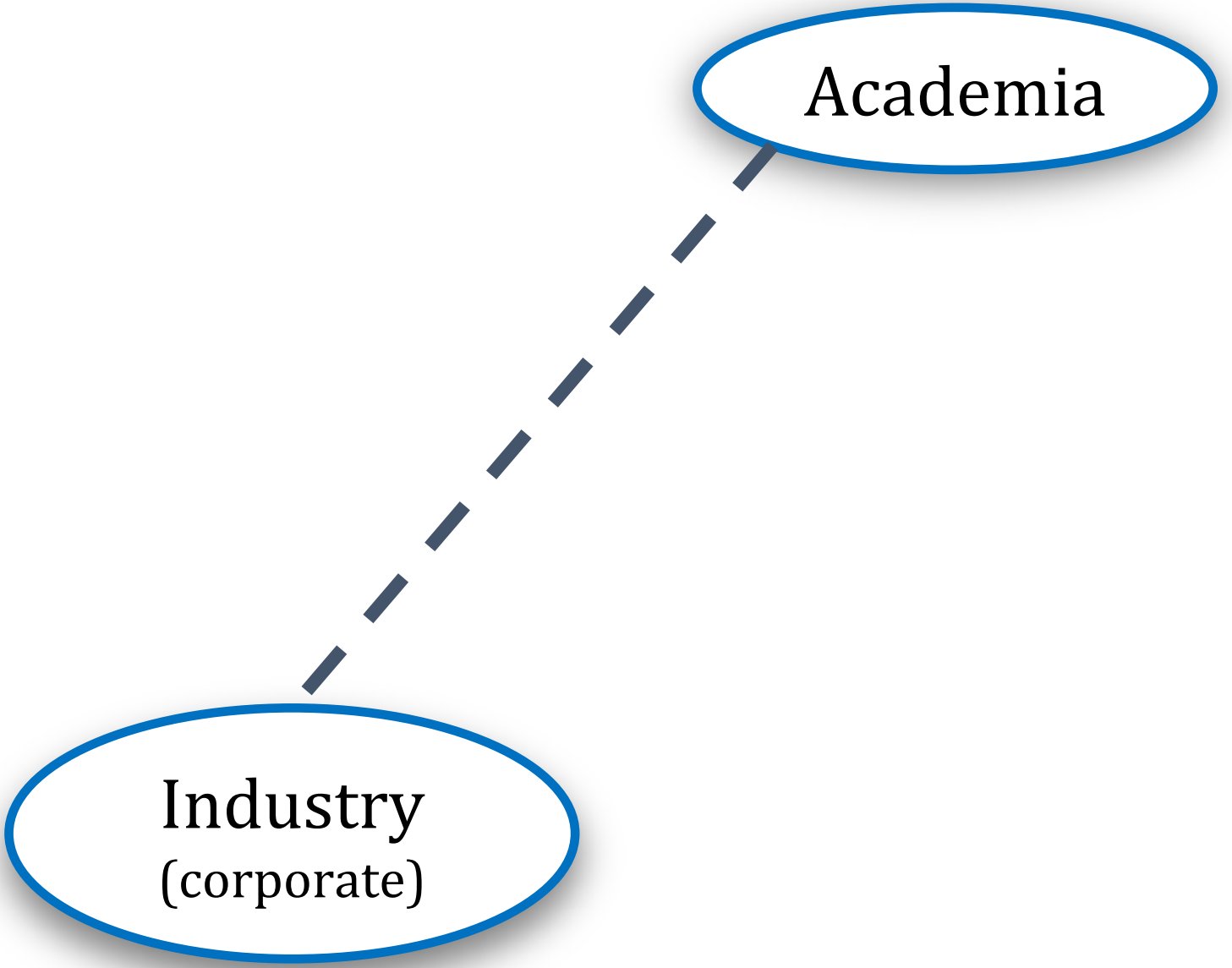
Depth

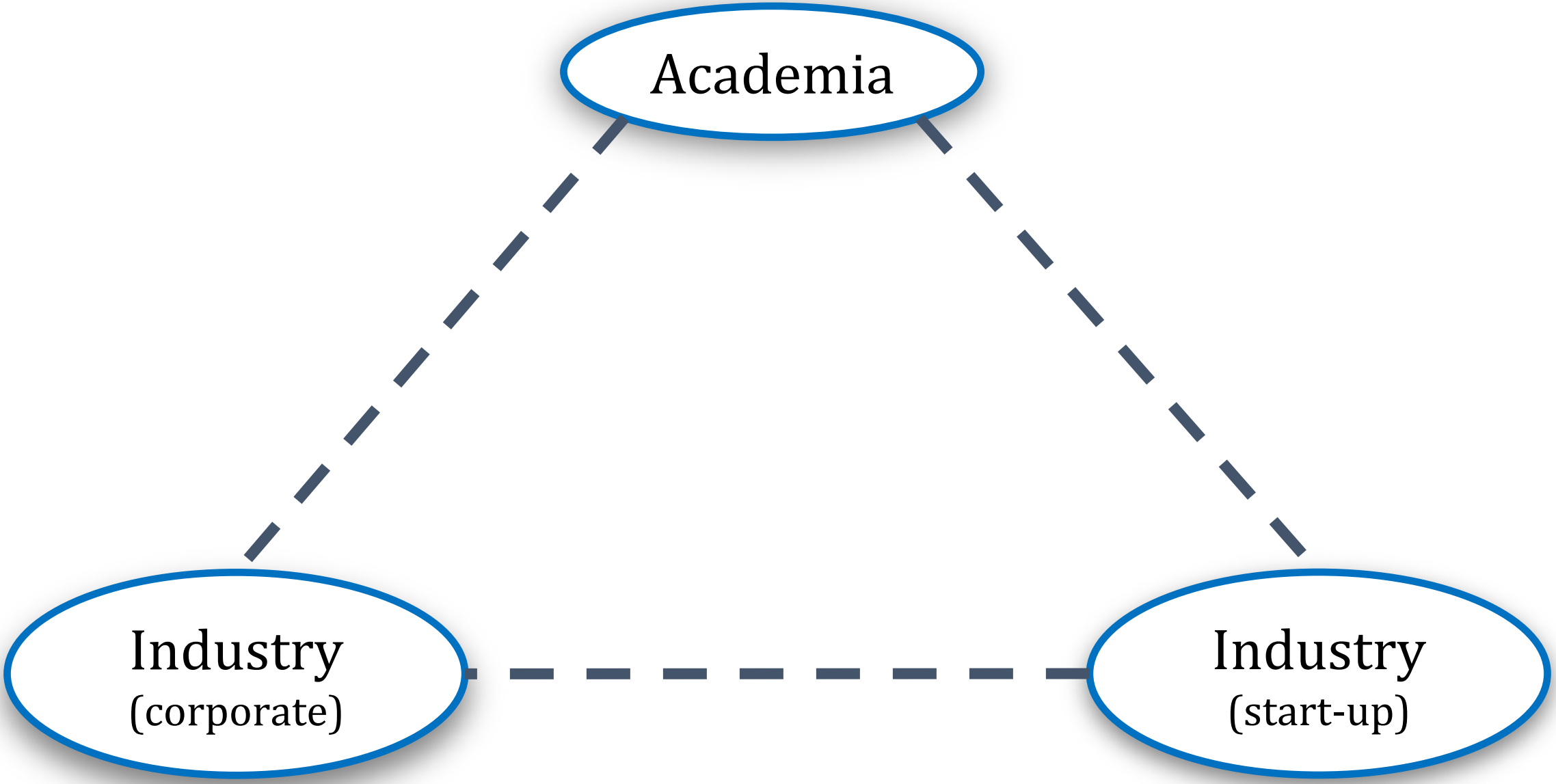
Doctorate in Italy, doctorate in the US: how do they compare?

Depth ⟷ Breadth

You got your doctorate: who's going to be your collaborator?


Academia


Academia
Industry
(corporate)


Academia
Industry
(corporate)
Industry
(start-up)

What is a doctorate good for?

Learn how to do research

- Training in:
  - Wet-lab, dry-lab
  - Public speaking
  - Interaction with peers

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  - **Mentoring**

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Learn how to do research

- Training in:
  - Wet-lab, dry-lab
  - Public speaking
  - Interaction with peers
  - **Mentoring**
  - **Project proposal development**

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Learn how to do research

- Training in:
  - Wet-lab, dry-lab
  - Public speaking
  - Interaction with peers
  - **Mentoring**
  - **Project proposal development**
  - **Consulting**

What is a doctorate good for?

Learn how to lead research

- Training in:
  - Wet-lab, dry-lab
  - Public speaking
  - Interaction with peers
  - **Mentoring**
  - **Project proposal development**
  - **Consulting**

My list of (experienced) suggestions:

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1. Get your doctorate

My list of (experienced) suggestions:

1. Get your doctorate
2. Don’t get scared if it feels like falling off a cliff

My list of (experienced) suggestions:

1. Get your doctorate
2. Don’t get scared if it feels like falling off a cliff
3. *Look around, choose your own ground*