

Staff Handbook

Name	<i>Prof. Dr. Ir. Nurliyani, MS., IPM.</i>		
Post	<i>Egg and Milk Technology</i>		
Academic career	<i>Professional Engineering (IPM)</i>	<i>Universitas Gadjah Mada</i>	<i>2018</i>
	<i>Professor (Prof)</i>	<i>Universitas Gadjah Mada</i>	<i>2018</i>
	<i>Doctorate (Animal Science)</i>	<i>Universitas Gadjah Mada</i>	<i>2006</i>
	<i>Graduate degree (Animal Science)</i>	<i>Universitas Gadjah Mada</i>	<i>1992</i>
	<i>Undergraduate degree (Animal Science)</i>	<i>Universitas Gadjah Mada</i>	<i>1984</i>
Employment	<i>Professor</i>	<i>Universitas Gadjah Mada</i>	<i>2016-present</i>
	<i>Associate Professor</i>	<i>Universitas Gadjah Mada</i>	<i>2008-2016</i>
	<i>Assistant Professor</i>	<i>Universitas Gadjah Mada</i>	<i>2001-2008</i>
Research and development projects over the last 5 years	<p><i>Research projects:</i></p> <ol style="list-style-type: none"> <i>1. Isolation and characterization of egg ovomucoid protein as immunomodulator and anticancer (2021)</i> <i>Source of funds: PD-Dikti</i> <i>2. Quality and functional properties of local chicken eggs Murung Panggang, Merawang and KUB (2021)</i> <i>Source of funds: Laboratory Thematic Grants, Faculty of Animal Science UGM</i> <i>3. Development of Queen Bee and Calliandra Propagation Techniques for Red Flowers, Corn, Sunflowers as Food for Bees Trigona sp. To Increase Honey and Pollen Production (2020)</i> <i>Source of funds: PTUPT Ristekdikti</i> <i>4. Domestication and Cultivation of Tetragonula laeviceps Bees: Evaluation of Honey Production Potential and Quality as an Immunomodulator (2020)</i> <i>Source of funds: PDD Ristekdikti</i> <i>5. Development of Mozzarella Cheese Using Kefir with the Addition of Gelatin Study on the Characteristics of Frozen Yogurt with the Addition of Gelatin and Transglutaminase During Storage (2020)</i> <i>Source of funds: Postgraduate Grants Faculty of Animal Science UGM</i> <i>6. Changes in Egg Protein with Various Processing Processes (2020)</i> <i>Source of funds: Thematic Grant for Laboratory of the Faculty of</i> 		

Animal Science UGM

7. *Domestication and Cultivation of Tetragonula laeviceps Bees: Evaluation of Honey Production Potential and Quality as Immunomodulator (2019)*

Source of funds: PDD Ristekdikti

8. *Development of Queen Bee and Calliandra Propagation Techniques for Red Flowers, Corn, Sunflowers as Food for Bees Trigona sp. To Increase Honey and Pollen Production (2019)*

Source of funds: PTUPT Ristekdikti

9. *Production of Processed Milk "Rasogolla" for the Initiation of Commercial Products (2019)*

Source of funds: BOPTN BH PIAT UGM

10. *Domestication and Cultivation of Tetragonula laeviceps Bees: Evaluation of Honey Production Potential and Quality as Immunomodulator (2019)*

Source of funds: Final Project Recognition Program, UGM

11. *Production and Commercialization of Slimming Pudding and Jelly Based on Glucomannan Porang (2019)*

Source of funds: Ristekdikti

12. *Modification of the "Dangke" Manufacturing Process with Sterilization Using Autoclave (2019)*

Source of funds: Thematic Research Grant for the Faculty of Animal Husbandry UGM

13. *Characteristics of Cured Egg Yolk Cookies with Different Percentages of Substitution of Skimmed Milk Powder (2019)*

Source of funds: Postgraduate Grants, Faculty of Animal Science UGM

14. *Diversification of Goat's Milk Cheese with Addition of Liquid Smoke and Glucomannan Porang (Amorphophallus oncophyllus): Study of antioxidant and immunomodulatory effects (2018)*

Source of funds: Applied Research Leading Higher Education (PTUPT), Ristekdikti

15. *Optimization of the Collagen Isolation Process from Indonesian Local Goatskin for Health Food Products (2018)*

Source of funds: Masters Education Research towards Doctorate for Superior Bachelors (PMDSU), Ristekdikti

16. *Characteristics of Mayonnaise Formulated with Snakehead Fish*

	<p><i>Oil (Channa striata) and Fermented Milk (2018)</i></p> <p><i>Source of funds: Thematic Laboratory Grant, Faculty of Animal Science UGM</i></p> <p>17. <i>Diversification of Goat's Milk Cheese with Addition of Liquid Smoke and Glucomannan Porang (Amorphophallus oncophyllus): Study of antioxidant and immunomodulatory effects (1st Year) (Chairman) (2017)</i></p> <p><i>Source of funds: PUPT, DIKTI</i></p> <p>18. <i>Optimization of Collagen Isolation Process from Indonesian Local Goat Skin for Health Food Products (Member) (2017)</i></p> <p><i>Source of funds: PMDSU</i></p> <p>19. <i>Product Development of Goat Milk Fermentation Using Cultures of Lactobacillus paracasei M104 and Pediococcus pentosaceus M103) (Member) (2017)</i></p> <p><i>Source of funds: Thematic Laboratory of the Faculty. UGM Farm</i></p> <p>20. <i>Evaluation of Lactic Acid Bacteria Isolate from Goat's Milk as a Starter for Fermented Milk Production (Member of 4 Researchers) (2016)</i></p> <p><i>Source of funds: Thematic Grant for Laboratory of the Faculty of Animal Husbandry UGM</i></p> <p>21. <i>The Role of Kombucha Starter in Probiotic Goat Milk Fermentation (Member of 4 Researchers) (2016)</i></p> <p><i>Source of funds: Postgraduate Research Grants Faculty of Animal Science UGM</i></p> <p>22. <i>Development of Fermented Milk Drink with Glucomannan Porang (Amorphophallus Oncophyllus) as a Synbiotic Product: A Study on Improvement of Metabolic Syndrome and Diversity of Digesta Microbiota (Chairman of 3 Researchers) (2016)</i></p> <p><i>Source of funds: PUPT DIKTI</i></p> <p><i>Community service over the last 5 years:</i></p> <p>1. <i>Dissemination of Dangke Processing to Increase Added Value of Cow's Milk in Farmers Groups in Purwobinangun Village, Pakem-Sleman District, Yogyakarta (2020)</i></p> <p><i>Source of funds: Thematic Grants for Laboratory Service, Faculty of Animal Science UGM</i></p> <p>2. <i>Dissemination of Processed Longegg Eggs and Eggnog Drinks to the Karangturi Family Welfare Program Group, Baturetno</i></p>
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	<p><i>Village, Banguntapan District, Bantul (2019)</i></p> <p><i>Source of funds: TTG Grant, UGM</i></p> <p>3. <i>Initiation of Packaged Egg Rendang for Fast Food Business in an Effort to Support Entrepreneurial Growth in Somokaton Sitimulyo Piyungan Hamlet, Bantul (2019)</i></p> <p><i>Source of funds: Faculty of Animal Science, Gadjah Mada University</i></p> <p>4. <i>Empowerment of Dairy Cattle Farmers through the Implementation of Integrated Farming at the Annual Village Cattle Group of Pacitan Regency (2019)</i></p> <p><i>Source of funds: Faculty of Animal Husbandry Universitas Gadjah Mada</i></p> <p>5. <i>Dissemination of Appropriate Technology in Egg Processing and Utilization of Eggshell at Al Faata Islamic Boarding School Timbulharjo Village, Sewon District, Bantul Regency (2018)</i></p> <p><i>Source of funds: Assisted Village Grant, BPPTNBH</i></p> <p>6. <i>Evaluation and Improvement of Sanitation and Hygiene from Pasteurized Milk SMEs in the Special Region of Yogyakarta (2018)</i></p> <p><i>Source of funds: Thematic Service Grants for the Faculty of Animal Science Laboratory UGM</i></p> <p>7. <i>Development of Dairy Agroindustry Villages Based on Local Potential Through Commercialization of Goat's Milk Ice Cream (Based on Fostered Villages) (2017)</i></p> <p><i>Source of funds: LPPM-UGM</i></p> <p>8. <i>Making Candy Milk Gama Assorted Flavor Products (Product Sample Making Program, Collaboration with Partners Andini Gotro Tambak Rejo) (2017)</i></p> <p><i>Source of funds: PUI UGM</i></p> <p>9. <i>Product Development of Goat Milk Kefir Ice Cream as Functional Food (Product Sample Making Program) (2017)</i></p> <p><i>Source of funds: PUI UGM</i></p> <p>10. <i>Providing Training to the Community: Resource Person for Training on the Implementation of Food Quality and Safety Standards (2017)</i></p> <p><i>Source of funds: Badan POM DIY</i></p> <p>11. <i>Resource Person in Management and Marketing Activities of Dairy Farming Products for Fiscal Year 2017 at the Office of</i></p>
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	<p><i>Livestock and Fishery Services, Magelang Regency (2017)</i></p> <p><i>Source of funds: Department of Livestock and Fisheries, Magelang Regency</i></p> <p>12. <i>Dairy Cow "Dairy Product Processing" (Free Lecture "For You Our Farmers Serve") (2017)</i></p> <p><i>Source of funds: Non-binding Funds</i></p> <p>13. <i>Dissemination of Milk Processing Technology in Andini Gotro's Livestock Group (2017)</i></p> <p><i>Source of funds: Thematic Grant of the Faculty of Medicine. UGM Farm</i></p> <p>14. <i>Strengthening Dairy Farmers Towards A Strong Dairy Agribusiness Concept: Improving the Quality of Fresh Milk (Members) (2016)</i></p> <p><i>Source of funds: Thematic Grants for the Faculty of Animal Husbandry</i></p> <p>15. <i>Growing Farmers' Motivation in Processing Pasteurized Milk to Increase Added Value of Goat's Milk in Bejo Cattle Group, Kloposawit Hamlet Open House "Cultivation of Livestock Products" at the service activity "For You Our Farmers Are Devoted" (September 3, 2016) (2016)</i></p> <p><i>Source of funds: PT SANTORI</i></p>
Industry collaborations over the last 5 years	-
Patents and proprietary rights	<p><i>High Fiber and Fat-Free Jelly Formula Contains Glucommanan Porang (Eni Harmayani, Sri Rahayoe, Lily Arsanti Lestari, Nurliyani, Didik Purwadi, Nurullia Nur Utami, Ayu Nindhitasani Bhakti Addini) (Patent)</i> 2022</p>
Important publications over the last 5 years	<p><i>Total number of publications: 39</i></p> <ol style="list-style-type: none"> <i>Synbiotic goat milk kefir improves health status in rats fed a high-fat and high-fructose diet (Nurliyani N, Harmayani E, Sunarti S) (2022)</i> <i>Publisher: Veterinary World, 15(1): 173-181</i> <i>Using kefir glucomannan to modify the diversity and composition of cecum bacterial in Sprague Dawley rats with metabolic syndrome (Desnilasari, D., Harmayani, E., Widada, J., Nurliyani) (2021)</i> <i>Publisher: IOP Conference Series: Materials Science and Engineering, 2021, 1011(1), 012009</i>

3. *Ice cream characteristic with cured egg yolk powder as whipping cream replacer* (Citravia Agustin, **Nurliyani**, Jamhari). (2021)
 Publisher: *Jurnal Ilmu dan Teknologi Hasil Ternak (JITEK)*, 16 (1).DOI : 10.21776/ub.jitek.2021.016.01.2 11
4. *Quality of Goat Milk Cheese with Addition of Rice Bran oil Ripened Using Lactobacillus casei and Streptococcus thermophilus* (**Nurliyani**, Indratiningsih, Widodo , Endang Wahyuni) (2020)
 Publisher: *Jurnal Ilmu dan Teknologi Hasil Ternak (JITEK)* Vol 15, No 1:1-12 March, 2020
5. *Characteristics of Purple Sweet Potato Yogurt and Its Effect on Lipid Profiles of Sprague Dawley Rats Fed with High Fat Diet* (Lily Arsanti Lestari, Prasetyastuti, **Nurliyani**) 2020 *Journal of Food and Pharmaceutical Sciences*, Volume 8(2), 2020: 242-253
 ISSN: 2339-0948
<https://jurnal.uqm.ac.id/v3/JFPS/article/view/679/217>.
6. *Imunologi Susu* (2020)
 Publisher: *Buku: Cetakan 1, 320 hal. Penerbit: Gajah Mada University Press, Yogyakarta. ISBN:978-602-386-830-8*
7. *The honey and propolis production from Indonesian stingless bee: Tetragonula laeviceps* (Agussalim, **Nurliyani**, Umami, N., Agus, A.) (2020)
 Publisher: *Livestock Research for Rural Development*, 2020, 32(8)
8. *Physicochemical properties of honey produced by the Indonesian stingless bee: Tetragonula laeviceps* (Agussalim,, Agus, A., **Nurliyani**, Umami, N., Budisatria, I.G.S.) (2019)
 Publisher: *IOP Conference Series: Earth and Environmental Science*, 2019, 387(1), 012084
9. *Characteristics of fermented goat milk using combination of kombucha and Lactobacillus casei starters* (**Nurliyani**, Indratiningsih,, Widodo, Sukarno, A.S., Suciati, F.) (2019)
 Publisher: *IOP Conference Series: Earth and Environmental Science*, 2019, 387(1), 012077
10. *Evaluation of antioxidant activity, phenolic, flavonoid and Vitamin C content of several honeys produced by the Indonesian stingless bee: Tetragonula laeviceps* (Agus, A., Agussalim, **Nurliyani**, Umami, N., Budisatria, I.G.S.) (2019)
 Publisher: *Livestock Research for Rural Development*, 2019,

31(10)

11. *The sugar content profile of honey produced by the Indonesian Stingless bee, *Tetragonula laeviceps*, from different regions* (Agussalim, A., Agus, A., **Nurliyani, N.**, Umami, N.) (2019)

Publisher: Livestock Research for Rural Development, 2019, 31(6)

12. *The Effect of Different Starter Cultures of *Lactobacillus paracasei* M104 and *Pediococcus pentosaceus* M103 on the Physicochemical and Microbial Qualities of Fermented Goat Milk* (W Widodo, AP Sakti, AS Sukarno, E Wahyuni, **N Nurliyani**) (2019)

Publisher: Jurnal Ilmu dan Teknologi Hasil Ternak (JITEK) 14 (2), 70-77

13. *Kestabilan emulsi dan oksidasi low fat mayonnaise menggunakan kefir sebagai alternatif emulsifier* (H Evanuarini, **N Nurliyani**, I Indratiningsih, P Hastuti) (2019)

Publisher: Jurnal Ilmu-Ilmu Peternakan 29 (1), 83-94

14. *Physicochemical, Microbiological and Sensory Properties of Fermented Whey using Kombucha Inoculum* (F Suciati, **N Nurliyani**, I Indratiningsih) (2019)

Publisher: Buletin Peternakan 43 (1): 52-57

15. *Synbiotic Cheese from Goat Milk Suppresses Indomethacin-induced Intercellular Cell Adhesion Molecule-1 (ICAM-1) Expression in a Rat Model of Gastric Injury* (Salmi, **Nurliyani** and Sunarti) (2019)

Publisher: International Journal of Probiotics and Prebiotics Vol. 14, pp. 32–36

16. *Fatty Acid Profile of Synbiotic Cheese and its Effect on Intestinal Inflammation in Rats* (**Nurliyani**, Eni Harmayani, Satyaguna Rahmatulloh and Kanita Galih Julia Rakasivi) (2019)

Publisher: International Journal of Probiotics and Prebiotics, Vol. 14, Pp. 45–50.

17. *Free Amino Acids Profile of Honey Produced by the Indonesian Stingless Bee: *Tetragonula laeviceps** (2019)

Publisher: Proceedings The 8th ISTAP International Seminar on Tropical Animal Production "Prospects and Challenges for Sustainable Tropical Animal Production Systems", September 23-25, 2019, Yogyakarta, Indonesia. Page 149-152. ISBN: 978-979-1215-37-4. <https://istap.ugm.ac.id/> Published by: Faculty of

18. Goat Milk Kefir Supplemented With Porang Glucomannan Improves Lipid Profile And Haematological Parameter In Rat Fed High Fat And High Fructose Diet (**Nurliyani**, Eni Harmayani, Sunarti) (2018)

Publisher: Romanian Journal of Diabetes Nutrition & Metabolic Diseases, Vol. 25 No. 1 Page 11-21

19. Impact of Small Holder Dairy Farm on the Air Quality in Gunungpati District, Semarang Municipality (Widiastuti, E., Kustono, K., Adiarto, A., **Nurliyani, N.**, Sugiharto, S.) (2018)

Publisher: IOP Conference Series: Earth and Environmental Science, 2018, 119(1), 012064

20. Characteristics of goat milk cheese added with liquid smoke and porang glucomannan ripened with *Lactobacillus rhamnosus* (**Nurliyani**, Harmayani, E.) (2018)

Publisher: International Journal of Dairy Science, 2018, 13(1), pp. 7–14

21. Goat-Soy milk kefir increase nitric oxide bioavailability by increasing endothelial nitric oxide synthase (eNOS) gene expression in diabetic rats (Muntafiah, A., **Nurliyani**, Sunarti) (2018)

Publisher: Progress in Nutrition, 2018, 20, pp. 257–262

22. Optimization of conditions for extraction of pepsin-soluble collagen from Indonesian local “kacang” goatskin by response surface methodology (Wahyuningsih, R., Rusman, **Nurliyani**, Pertiwiningrum, A., Rohman, A., Fitriyanto, N.A., Erwanto, Y.) (2018)

Publisher: American Journal of Animal and Veterinary Sciences, 2018, 13(2), pp. 70–75

23. Optimization of acid soluble collagen extraction from Indonesian local “Kacang” goat skin and physico-chemical properties characterization (Wahyuningsih, R., Rusman, **Nurliyani**, Pertiwiningrum, A., Rohman, A., Fitriyanto, N.A., Erwanto, Y.) (2018)

Publisher: Chemical Engineering Transactions, 2018, 63, pp. 703–708

24. Studies on anti-allergy effect of glucomannan extract from porang (*Amorphophallus oncophyllus*) tuber (A Ulfah, **Nurliyani**, K Nishi, E Harmayani, T Sugahara) (2018)

Publisher: ALLERGY 73, 468-469

25. *Fatty Acid Profile and Organic Acid Content of Goat Milk Cheese Added with Liquid Smoke and Porang Glucomannan Ripened with Lactobacillus rhamnosus (Nurliyani & Harmayani, E.) (2018)*

Publisher: E-Proceedings 18th AAAP Congress 2018, 1-5 Aug. 2018, Kuching, Malaysia. pp. 89

26. *Kefir Fermented with Glucomannan from Porang Tuber to Improve the Health of Metabolic Syndrome Rats (2017)*

Publisher: Proceedings of 3rd International Conference on Food and Biosystems Engineering (3rd FaBE, 2017), Yunani, 1- 4 Juni 2017. Pages: 100-109. ISBN: 978-960-9510-23-3

27. *Characterization and Antioxidant Activity of Fermented Milk Produced with a Starter Combination (2017)*

Publisher: Pakistan Journal of Nutrition Vol. 16 (6): 451-456, 2017. ISSN: 1680-5194. DOI: 10.3923/pjn.2017.451.456

28. *Chemical and sensory quality of milk fermented by starter combination of Lactobacillus plantarum Dad 13, Lactococcus lactis, and Yeast (2017)*

Publisher: The 7th International Seminar on Tropical Animal Production (ISTAP), September 12-14, 2017, Yogyakarta, Indonesia. Pages: 400-408. ISBN: 978-979-1215-29-9

29. *Properties of Goat Milk Kefir Supplemented with Glucomannan from Porang (Amorphophallus oncophyllus) Tuber (2017)*

Publisher: The 7th International Seminar on Tropical Animal Production (ISTAP), September 12-14, 2017, Yogyakarta, Indonesia. Pages: 419-424. ISBN: 978-979-1215-29-9

30. *The Effect of Starting Time of Hand Milking on Lactation Period and Milk Production of Etawah Crossedbred Goat in Smallholder (2017)*

Publisher: The 7th International Seminar on Tropical Animal Production (ISTAP), September 12-14, 2017, Yogyakarta, Indonesia. Pages: 850-854. ISBN: 978-979-1215-29-9

31. *Goat milk kefir increases the phagocytosis activity of peritoneal macrophages in diabetic rat (2017)*

Publisher: Program and Abstract Book of the Sixth SAADC Conference, Batu 16 – 19 October 2017 "Wisdom of Using Local Resources for Development of Sustainable Animal Production in Developing Countries". Batu City, Indonesia. Page: 143

32. *Evaluasi Isolat Lactobacillus paracasei M104 Asal Susu Kambing sebagai Starter Fermentasi Susu dengan Berbagai Level Kombinasi Medium (Penulis ke-2 dari 4) (2016)*
- Publisher: Prosiding Simposium Nasional Penelitian dan Pengembangan Peternakan Tropik Tahun 2016. Fakultas Peternakan Universitas Gadjah Mada, Yogyakarta. ISBN: 978-979-1215-28-2, hal: 399*
33. *Evaluation of Lactic Acid Bacteria from Ettawah Crossbred Goat Milk as Probiotic (Penulis ke-1 dari 3) (2016)*
- Publisher: Proceedings of The 17th Asian-Australasian Association of Animal Production Societies Animal Science Congress, 22-25 August 2016, Fukuoka Japan*
34. *The Effect of Supplementation Ginger (Z. Officinale) Powder on Feed Consumption, Milk Production and Components of Goat (Penulis ke-2 dari 3) (2016)*
- Publisher: Proceedings of The 17th Asian-Australasian Association of Animal Production Societies Animal Science Congress, 22-25 August 2016, Fukuoka Japan*
35. *Characteristic and Emulsion Stability of Low Fat Mayonnaise Using Rice Bran Oil and Kefir (Penulis ke-2 dari 4) (2016)*
- Publisher: Proceedings of The 17th Asian-Australasian Association of Animal Production Societies Animal Science Congress, 22-25 August 2016, Fukuoka Japan*
36. *Value-Added of Processed Fresh Milk and Hygiene Behavior on Pavement Milk Trader and Milk Café in Yogyakarta Indonesia (Penulis ke-3 dari 4) (2016)*
- Publisher: Journal of Advanced Agricultural Technologies Vol. 3 (2) (June 2016) pages: 110-113. ISSN: 2373-423X*
37. *Application of Porang Flour for Fat Replacer in Reduced Fat Mayonnaise (Penulis ke-2 dari 3) (2016)*
- Publisher: Proceeding The 3rd APIS and 3rd ARCAP in Batu October 19-21, 2016*
38. *Value-Added of Processed Fresh Milk and Hygiene Behavior on Pavement Milk Trader and Milk Café in Yogyakarta Indonesia (2016)*
- Publisher: Journal of Advanced Agricultural Technologies Vol. 3 (2) (June 2016) pp 110-113. ISSN: 2373-423X*
39. *Isolation and Identification of Goat Milk-Derived Lactobacillus paracasei M104 and Pediococcus pentosaceus M103 and Their Potential Use as Starter Culture for Fermentation ((Penulis ke-3*

	<p><i>dari 5) (2016)</i></p> <p><i>Publisher: Journal of Microbiology, Biotechnology and Food Sciences Vol. 5 (4) pages: 374-377. ISSN: 1338-5178</i></p>
Activities in specialist bodies over the last 5 years	-