This information is current as of April 14, 2017.

179 (7)

J Immunol 2007; 179:4297-4944; ;
http://www.jimmunol.org/content/179/7

Subscription
Information about subscribing to The Journal of Immunology is online at:
http://jimmunol.org/subscription

Permissions
Submit copyright permission requests at:
http://www.aai.org/About/Publications/JI/copyright.html

Email Alerts
Receive free email-alerts when new articles cite this article. Sign up at:
http://jimmunol.org/alerts
4297  **IN THIS ISSUE**

### PILAR OF IMMUNOLOGY

4299  **The Peptide Cargo of Class I Molecules: Not Just Passive Passengers**

_Hidde L. Ploegh_


_Alain Townsend, Claes Öhleén, Judy Bastin, Hans-Gustaf Ljunggren, Linda Foster, and Klas Kärre_

### BRIEF REVIEWS

4307  **A New Class of Reverse Signaling Costimulators Belongs to the TNF Family**

_Mingyi Sun and Pamela J. Fink_

### CUTTING EDGE

4313  **Cutting Edge: An In Vivo Requirement for STAT3 Signaling in T17 Development and T17-Dependent Autoimmunity**

_Timothy J. Harris, Joseph F. Gros, Hung-Rong Yen, Hong Xin, Marcin Kortylewski, Emilia Albesiano, Edward L. Hipkiss, Derese Getnet, Monica V. Goldberg, Charles H. Maris, Franck Houseau, Hua Yu, Drew M. Pardoll, and Charles G. Drake_

4318  **Cutting Edge: Lack of Evidence for Connexin-43 Expression in Human Epidermal Langerhans Cells**

_Simone C. Zimmerli, Florence Maison, José Cancela, Paolo Meda, and Conrad Hauser_

### CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

4323  **CD8+CD28− T Regulatory Lymphocytes Inhibiting T Cell Proliferative and Cytotoxic Functions Infiltrate Human Cancers**

_Gilberto Filaci, Daniela Fenoglio, Marco Fravega, Gianluca Ansald, Giacomo Borgonovo, Paolo Traverso, Barbara Villaggio, Alessandra Ferrera, Annalisa Kunkl, Maria Rizzi, Francesca Ferrera, Piercesare Balestra, Massimo Ghi, Paola Contini, Maurizio Setti, Daniel Olive, Bruno Azzarone, Giorgio Carmignani, Jean Louis Ravetti, Giancarlo Torre, and Francesco Indiveri_

---

On the cover: 40x H&E stain of paraformaldehyde-fixed and paraffin-embedded human skin grafted onto C.B-17 SCID/beige mice that had been adoptively transferred with human effector memory CD4+ T cells (CD45RO+CCR7−CD62L−) and harvested after 3 wk. The dermis shows signs of significant rejection including extensive infiltration of leukocytes and thrombosis of the microvasculature. Shiao, S. L., N. C. Kirkiles-Smith, B. R. Shepherd, J. M. McNiff, E. J. Carr, and J. S. Pober. 2007. Human effector memory CD4+ T cells directly recognize allogeneic endothelial cells in vitro and in vivo. _J. Immunol._ 179: 4297–4944.
4335 Natural Phosphorylation of CD5 in Chronic Lymphocytic Leukemia B Cells and Analysis of CD5-Regulated Genes in a B Cell Line Suggest a Role for CD5 in Malignant Phenotype
Hélène Gary-Gouy, Alexandre Sainz-Perez, Jean-Brice Marteau, Anne Marfaing Koka, Jozo Delic, Hélène Merle-Beral, Pierre Galanoud, and Ali Dalloul

4345 Copolymer-1 Induces Adaptive Immune Anti-inflammatory Glial and Neuroprotective Responses in a Murine Model of HIV-1 Encephalitis
Santhi Gorantla, Jianou Liu, Hannah Sneller, Huanyu Dou, Adelina Holguin, Lynette Smith, Tsuneya Ikezu, David J. Volsky, Larisa Poluektova, and Howard E. Gendelman

4357 TLR2 Signaling Renders Quiescent Naive and Memory CD4+ T Cells More Susceptible to Productive Infection with X4 and R5 HIV-Type 1
Sandra Thibault, Mélanie R. Tardif, Corinne Barat, and Michel J. Tremblay

4367 Ambient Ozone Primes Pulmonary Innate Immunity in Mice
John W. Hollingsworth, Shuichiro Marnoka, Zhuwei Li, Stavros Garantziotis, Erin N. Potts, David M. Brass, Alan Fong, W. Michael Foster, and David A. Schwartz

4376 Binding of Lymphoid Chemokines to Collagen IV That Accumulates in the Basal Lamina of High Endothelial Venules: Its Implications in Lymphocyte Trafficking
Bo-Gie Yang, Toshiyuki Tanaka, Myoung Ho Jung, Zhongbin Bai, Haruko Hayasaka, and Masayuki Miyasaka

4383 Normal Establishment of Virus-Specific Memory CD8 T Cell Pool following Primary Infection during Pregnancy
Carolyn M. Constantin, David Masopust, Tania Gourley, Jason Grayson, Ora L. Strickland, Rafi Ahmed, and Elizabeth A. Bonney

4390 Serine Protease Inhibitor 6-Deficient Mice Have Increased Neutrophil Immunity to Pseudomonas aeruginosa
Manling Zhang, Ni Liu, Sun-Mi Park, Yue Wang, Susan Byrne, Andrea E. Murmann, Scott Bahr, and Marcus E. Peter, Steven T. Olson, Abderrazzaq Belaouaj, and Philip G. Ashton-Rickardt

4397 Human Effector Memory CD4+ T Cells Directly Recognize Allogeneic Endothelial Cells In Vitro and In Vivo
Stephen L. Shiao, Nancy C. Kirkiler-Smith, Benjamin R. Shepherd, Jennifer M. McNiff, Edward J. Carr, and Jordan S. Pober

4405 The Transcription Factor Zbtb7b Promotes CD4 Expression by Antagonizing Runx-Mediated Activation of the CD4 Silencer
Kathryn F. Wildt, Guangqing Sun, Baerbel Grueter, Maria Fischer, Monica Zamiach, Marc Ehlers, and Rémy Boselut

4415 IL-27 Suppresses Th2 Cell Development and Th2 Cytokines Production from Polarized Th2 Cells: A Novel Therapeutic Way for Th2-Mediated Allergic Inflammation
Tomohiro Yoshimoto, Takayuki Yoshimoto, Koubun Yasuda, Junichiro Mizuguchi, and Kenji Nakanishi

4424 Intercellular Transfer of Carcinoembryonic Antigen from Tumor Cells to NK Cells
Noam Stern-Ginossar, Shlomo Nedvetzki, Gal Markel, Roi Gazit, Gili Better-Cohen, Hagit Achdout, Memet Aker, Richard S. Blumberg, Daniel M. Davis, Ben Appelmelk, and Ofer Mandelboim

4435 Ubiquitinylation of IgB Dictates the Endocytic Fate of the B Cell Antigen Receptor

4444 TLR4 on Follicular Dendritic Cells: An Activation Pathway That Promotes Accessory Activity
Mobey Eldin M. El Shikh, Rania M. El Sayed, Yongzhong Wu, Andreas K. Szakal, and John G. Tew

4451 Inhibition of Terminal Complement Components in Presensitized Transplant Recipients Prevents Antibody-Mediated Rejection Leading to Long-Term Graft Survival and Accommodation
Hao Wang, Jacqueline Arp, Weihua Liu, Susan J. Faas, Jifu Jiang, David R. Gies, Siobhan Ramcharran, Bertha Garcia, Robert Zhong, and Russell P. Rother

4464 B Cell Antigen Receptor-Induced Rac1 Activation and Rac1-Dependent Spreading Are Impaired in Transitional Immature B Cells Due to Levels of Membrane Cholesterol
Randall J. Breski and John G. Monroe
4473 Negative Regulation of CD40-Mediated B Cell Responses by E3 Ubiquitin Ligase Casitas-B-Lineage Lymphoma Protein-B
Guilin Qiao, Minxiang Lei, Zhenping Li, Yongjian Sun, Andrew Minto, Yang-Xin Fu, Haiyan Ying, Richard J. Quigg, and Jian Zhang

4480 Surfactant Protein A Activation of Atypical Protein Kinase C \( \zeta \) in IκB-\( \alpha \)-Dependent Anti-Inflammatory Immune Regulation
Christina Moulakakis, Stefanie Adam, Ulrike Setzer, Andrea B. Schromm, Michael Leitges, and Cordula Stamme

4492 T Regulatory Cells Control Numbers of NK Cells and CD8\( ^{+} \) Immature Dendritic Cells in the Lymph Node Paracortex
Martin Giroux, Ekaterina Yurchenko, Jessica St.-Pierre, Ciriacio A. Piccirillo, and Claude Perreault

4503 EAE Tolerance Induction with Hsp70-peptide Complexes Depends on H60 and NKG2D Activity
Grazyna Galazka, Anna Jurewicz, Wojciech Orlowski, Mariusz Stasiolek, Celia F. Brosnan, Cedric S. Raine, and Krzysztof Selmaj

4513 The CD16\( ^{+} \)CD56\( ^{bright} \) NK Cell Subset Is Resistant to Reactive Oxygen Species Produced by Activated Granulocytes and Has Higher Antioxidative Capacity Than the CD16\( ^{+} \)CD56\( ^{dim} \) Subset
Helena Harlin, Mikael Hanson, C. Christian Johansson, Daiju Sakurai, Isabel Poschke, Håkan Norell, Karl-Johan Malmberg, and Rolf Kiessling

4520 Pathogen-Specific CD8 T Cell Responses Are Directly Inhibited by IL-10
Partha Sarathi Biswas, Virginia Pedicord, Alexander Plass, Ewa Menet, Ingrid Leiner, and Eric G. Pamer

4529 Defective Alloreactive CD8 T Cell Function and Memory Response in Allograft Recipients in the Absence of CD4 Help
Yuan Zhai, Yue Wang, Zheng Wu, and Jerzy W. Kapiec-Weglinski

4535 Skin-Derived Dendritic Cells Can Mediate Deletional Tolerance of Class I-Restricted Self-Reactive T Cells

4542 IFN-\( \gamma \) Mediates TNF-\( \alpha \)-Induced STAT1 Phosphorylation and Induction of Retinoic Acid-Inducible Gene-I in Human Cervical Cancer Cells
Tomoh Matsumiya, Stephen M. Prescott, and Diana M. Stafforini

4550 CD83 Expression Is a Sensitive Marker of Activation Required for B Cell and CD4\( ^{+} \) T Cell Longevity In Vivo
Charlene M. Prazma, Norihito Yazawa, Yoko Fujimoto, Manabu Fujimoto, and Thomas F. Tedder

4563 Characterization of the Functional Properties of the Voltage-Gated Potassium Channel Kv1.3 in Human CD4\( ^{+} \) T Lymphocytes
Lina Hu, Michael Pennington, Qiong Jiang, Katharine A. Whartenby, and Peter A. Calabresi

4571 Killing Kinetics of Simian Immunodeficiency Virus-Specific CD8\( ^{+} \) T Cells: Implications for HIV Vaccine Strategies
Erik Rollman, Miranda Z. Smith, Andrew G. Brooks, Damian F. J. Purcell, Bartek Zuber, Ian A. Ramshaw, and Stephen J. Kent

4580 Neonatal FcR Expression in Bone Marrow-Derived Cells Functions to Protect Serum IgG from Catabolism
Shreeram Akilesh, Gregory J. Christianson, Derry C. Roopenian, and Andrey S. Shaw

4589 Phosphatidylinositol 3-Kinase/Akt Activation by Integrin-Tumor Matrix Interaction Suppresses Fas-Mediated Apoptosis in T Cells
Chung-Chen Su, Yu-Ping Lin, Yu-Jung Cheng, Jyun-Yuan Huang, Woei-Jer Chuang, Yan-Shen Shan, and Bei-Chang Yang

4598 Calcineurin Negatively Regulates TLR-Mediated Activation Pathways
Young Jin Kang, Brenda Kasler, Motoyuki Otsuka, Michael Hughes, Nobutaka Suzuki, Shinobu Suzuki, Wen-Chen Yeh, Shizuo Akira, Jiabuai Han, and Patricia P. Jones
Molecular and Structural Immunology

4608 Qa-1b-Dependent Modulation of Dendritic Cell and NK Cell Cross-Talk In Vivo
Paula Colmenero, Angela L. Zhang, Ting Qian, Linrong Lu, Harvey Cantor, Kalle Söderström, and Edgar G. Engleman

4616 All-trans Retinoic Acid Enhances Murine Dendritic Cell Migration to Draining Lymph Nodes via the Balance of Matrix Metalloproteinases and Their Inhibitors
Stephanie Darmanin, Jian Chen, Songji Zhao, Hongyan Cui, Reza Shirkoohi, Naoki Kubo, Yuji Kuge, Nagara Tamaki, Koji Nakagawa, Jun-ichi Hamada, Tetsuya Moriiuchi, and Masanobu Kobayashi

4626 CTLA-4 and CD4+CD25+ Regulatory T Cells Inhibit Protective Immunity to Filarial Parasites In Vivo
Matthew D. Taylor, Anjanette Harris, Simon A. Bahayan, Odile Bain, Abigail Calshaw, Judith E. Allen, and Rick M. Maini

4635 Fyn Regulates the Duration of TCR Engagement Needed for Commitment to Effector Function
Andrew Filby, Benedict Seddon, Joanna Kleczkowska, Robert Salmond, Peter Tomlinson, Michal Smida, Jonathan A. Lindquist, Burkhard Schraven, and Rose Zamoyska

4645 A Novel Mechanism for TNFR-Associated Factor 6-Dependent CD40 Signaling
Sarah L. Rowland, Mikaela M. Tremblay, Jason M. Ellison, Laura L. Stunz, Gail A. Bishop, and Bruce S. Hostager

4654 NK Dendritic Cells Expanded in IL-15 Exhibit Antitumor Responses In Vivo
Umer I. Chaudhry, George Plitas, Bryan M. Burt, T. Peter Kingham, Jesse R. Raab, and Ronald P. DeMatteo

4661 iNKT Cells Require CCR4 to Localize to the Airways and to Induce Airway Hyperreactivity
Everett H. Meyer, Marc-André Wurbel, Tracy L. Satoh, Muriel Pichavant, Matthew J. Kan, Paul B. Savage, Rosemarie H. DeKruyff, Eugene C. Butcher, James J. Campbell, and Dale T. Umetsu

4672 CS1 (CRACC, CD319) Induces Proliferation and Autocrine Cytokine Expression on Human B Lymphocytes
Jae Kyung Lee, Stephen O. Mathew, Swapnil V. Vaidya, Peppanaicken R. Kumaresan, and Porunelloor A. Mathew

4679 Krüppel-Like Factor 4 Regulates B Cell Number and Activation-Induced B Cell Proliferation
Jettanong Klaewsongkram, Yinhua Yang, Susanne Golech, Jonathan Katz, Klaus H. Kaestner, and Nan-ping Weng

4685 Autoantigen-Specific TGFβ-Induced Foxp3+ Regulatory T Cells Prevent Autoimmunity by Inhibiting Dendritic Cells from Activating Autoreactive T Cells
Richard J. DiPaolo, Carine Brinster, Todd S. Davidson, John Andersson, Deborah Glass, and Ethan M. Shevach

Immunogenetics

4694 Early Growth Response 1 and NF-ATc1 Act in Concert to Promote Thymocyte Development beyond the β-Selection Checkpoint
Ekaterina K. Kolosova, Maria Ciofani, Robert Benezra, Toru Miyazaki, Neil Clipstone, Juan Carlos Zúñiga-Pflücker, and David L. Wiest

Host Defense

4704 Genetic Variation in PTPN22 Corresponds to Altered Function of T and B Lymphocytes
Mary Rieck, Adrian Arechiga, Suna Onengut-Gumuscu, Carla Greenbaum, Patrick Concannon, and Jane H. Buckner

4711 Differential Role of TLR- and RLR-Signaling in the Immune Responses to Influenza A Virus Infection and Vaccination
Shohei Koyama, Ken J. Ishii, Himanu Kumar, Takeshi Tanimoto, Cesayir Coban, Satoishi Uematsu, Taro Kawai, and Shizuo Akira

4721 Alternatively Activated Macrophages in Intestinal Helminth Infection: Effects on Concurrent Bacterial Colitis
Meiqian Weng, Deke Huntley, I-Fei Huang, Ondulla Faye-Jackson, Lijian Wang, Aliese Sarkissian, Qingping Zhou, W. Allan Walker, Bobby J. Cherayil, and Hai Ning Shi
Live Attenuated Lentivirus Infection Elicits Polyfunctional Simian Immunodeficiency Virus Gag-Specific CD8+ T Cells with Reduced Apoptotic Susceptibility in Rhesus Macaques that Control Virus Replication after Challenge with Pathogenic SIVmac239

Meritxell Genisca, Tracy Rourke, Jun Li, Kristen Bost, Barinderpaul Chohan, Michael B. McChesney, and Christopher J. Miller

In Vivo Electroporation Enhances the Immunogenicity of Hepatitis C Virus Nonstructural 3/4A DNA by Increased Local DNA Uptake, Protein Expression, Inflammation, and Infiltration of CD3+ T Cells

Gustaf Ahlén, Jonas Söderholm, Torunn Tjelle, Rune Kjeken, Lars Fredin, Urban Höglund, Pontus Blomberg, Michael Fons, Iacob Mathiesen, and Matti Sällberg

TLR9 Activation Induces Normal Neutrophil Responses in a Child with IRAK-4 Deficiency: Involvement of the Direct PI3K Pathway

Cyrille Hoarau, Bénédicte Gérard, Emmanuel Lescanne, Dominique Henry, Sylvestre François, Jean-Jacques Lacapère, Jamel El Bennia, Pham My-Chan Dang, Bernard Grandchamp, Yvon Lebranchu, Marie-Anne Gougerot-Pocidalo, and Carole Elbim

Analysis of Eosinophil Turnover In Vivo Reveals Their Active Recruitment to and Prolonged Survival in the Peritoneal Cavity

Caspar Ohnmacht, Andrea Pullner, Nico van Roon, and David Voehringer

IFN Regulatory Factor 8 Mediates Apoptosis in Nonhemopoietic Tumor Cells via Regulation of Fas Expression

Dafeng Yang, Mathuamy Thangaraju, Darren D. Browning, Zheng Dong, Borys Korchin, Dina C. Lev, Vadivel Ganapathy, and Kevin Liu

ASC/PYCARD and Caspase-1 Regulate the IL-18/IFN-γ Axis during Anaplasma phagocytophilum Infection

João H. F. Pedro, Fayyaz S. Sutterwala, Bindu Sukumaran, Yasunori Ogura, Feng Qian, Ruth R. Montgomery, Richard A. Flavell, and Erol Fikrig

INFLAMMATION

The Role of the Prostaglandin D2 Receptor, DP, in Eosinophil Trafficking

Petra Schratl, Julia F. Royer, Evi Kostenis, Trond Ulven, Eva M. Storm, Maria Waldhoer, Gerald Hoefler, Rusina Schüliogoi, Irmgard Th. Lippe, Bernhard A. Peskar, and Akos Heinemann

Deletion of Secretory Group V Phospholipase A2 Attenuates Cell Migration and Airway Hyperresponsiveness in Immunosensitized Mice

Nilda M. Muñoz, Angelo Y. Meliton, Jonathan P. Arm, Joseph V. Bonventre, Wonhwa Cho, and Alan R. Leff

A Critical Role for TLR4 in the Pathogenesis of Necrotizing Enterocolitis by Modulating Intestinal Injury and Repair

Cynthia L. Leaphart, Jaime Cavallo, Steven C. Gribar, Selma Cetin, Jun Li, Maria F. Branca, Theresa D. Dubowski, Chhinder P. Sodhi, and David J. Hackam

TLR3-Dependent Induction of Nitric Oxide Synthase in RAW 264.7 Macrophage-Like Cells via a Cytosolic Phospholipase A2/Cyclooxygenase-2 Pathway

José Pindado, Jesús Balisinde, and Maria A. Balboa

Aging Up-Regulates Expression of Inflammatory Mediators in Mouse Adipose Tissue

Dayong Wu, Zhishong Ren, Munkyoung Pae, Weimin Guo, Xuelin Cui, Alfred H. Merrill, and Simin Nikbin Meydani

Generation of Th1 and Th2 Chemokines by Human Eosinophils: Evidence for a Critical Role of TNF-α Lin Ying Liu, Mary Ellen Bates, Nizar N. Jarjour, William W. Buse, Paul J. Bertics, and Elizabeth A. B. Kelly

A Novel Inflammatory Pathway Involved in Leukocyte Recruitment: Role for the Kinin B1 Receptor and the Chemokine CXCL5

Johan Duchene, Florence Lecomte, Saleh Ahmed, Cécile Cayla, Joao Pesquero, Michael Bader, Mauro Perretti, and Amrita Ahluwalia

B Cells Amplify IFN-γ Production By T Cells via a TNF-α-Mediated Mechanism

Laurence C. Menard, Laurie A. Minns, Sylvie Darche, Daniel W. Mielcarek, David M. Foureau, David Roo, Florence Dziembonski, Lloyd H. Kasper, and Dominique Bazot-Gatel
Deficiency of the NF-κB Inhibitor Caspase Activating and Recruitment Domain 8 in Patients with Rheumatoid Arthritis Is Associated with Disease Severity
Ana Fontalba, Victor Martinez-Taboada, Olga Gutierrez, Carlos Pipaon, Natividad Benito, Alejandro Balsa, Ricardo Blanco, and Jose L. Fernandez-Luna

CLINICAL IMMUNOLOGY

Synergistic Induction of Antigen-Specific CTL by Fusions of TLR-Stimulated Dendritic Cells and Heat-Stressed Tumor Cells
Shigeo Koido, Eiichi Hara, Sadamu Homma, Makoto Mitsunaga, Akitaka Takahara, Eijiro Nagasaki, Hidejiro Kawahara, Michiaki Watanabe, Yoichi Toyama, Satoru Yanagisawa, Susumu Kobayashi, Katsuhiro Yanaga, Kiyotaka Fujita, Jianlin Gong, and Hisao Tajiri

Elf-1 Binds to GGAA Elements on the FcRγ Promoter and Represses Its Expression
Yuang-Taung Juang, Laarni Sumibcay, Mate Tolnay, Ying Wang, Vasileios C. Kyttaris, and George C. Tsokos

Defective Expression of Ras Guanyl Nucleotide-Releasing Protein 1 in a Subset of Patients with Systemic Lupus Erythematosus
Shinsuke Yasuda, Richard L. Stevens, Tomoko Terada, Masumi Takeda, Toko Hashimoto, Jun Fukae, Tetsuya Horita, Hiroyuki Kaasan, Tatsuya Atsumi, and Takao Koike

Achieving Donor-Specific Hyporesponsiveness Is Associated with FOXP3+ Regulatory T Cell Recruitment in Human Renal Allograft Infiltrates
Oriol Bestard, Josep M. Cruzado, Mariona Mestre, Anna Caldes, Jordi Bas, Marta Carrera, Joan Torras, Inés Rama, Francesc Moreo, Daniel Serón, and Josep M. Grinyó

4-1BB Is Superior to CD28 Costimulation for Generating CD8+ Cytotoxic Lymphocytes for Adoptive Immunotherapy
Hua Zhang, Kristen M. Snyder, Megan M. Suboski, Marcela V. Maus, Veena Kapoor, Carl H. June, and Crystal L. Mackall

Administration of a CD25-Directed Immunotoxin, LMB-2, to Patients with Metastatic Melanoma Induces a Selective Partial Reduction in Regulatory T Cells In Vivo
Daniel J. Powell, Jr., Aloisio Felipe-Silva, Maria J. Merino, Mojgan Abimazadeh, Tamika Allen, Catherine Levy, Donald E. White, Sharon Matroukakis, Robert J. Kreitman, Steven A. Rosenberg, and Ira Pastan

Activation-Induced Cytidine Deaminase Expression in Follicular Dendritic Cell Networks and Interfollicular Large B Cells Supports Functionality of Ectopic Lymphoid Neogenesis in Autoimmune Sialoadenitis and MALT Lymphoma in Sjögren’s Syndrome
Michele Bombardieri, Francesca Barone, Frances Humby, Stephen Kelly, Mark McGurk, Peter Morgan, Stephen Challacombe, Salvatore De Vita, Guido Valesini, Jo Spencer, and Costantino Pizzalini

Autoantibodies in Canine Masticatory Muscle Myositis Recognize a Novel Myosin Binding Protein-C Family Member
Xiaohua Wu, Zhi-fang Li, Randolph Brooks, Elizabeth A. Komives, Justin W. Torpey, Eva Engevall, Steven L. Gonias, and G. Diane Shelton

Author Index

AAI Membership Application

AAI Trainee Membership Application